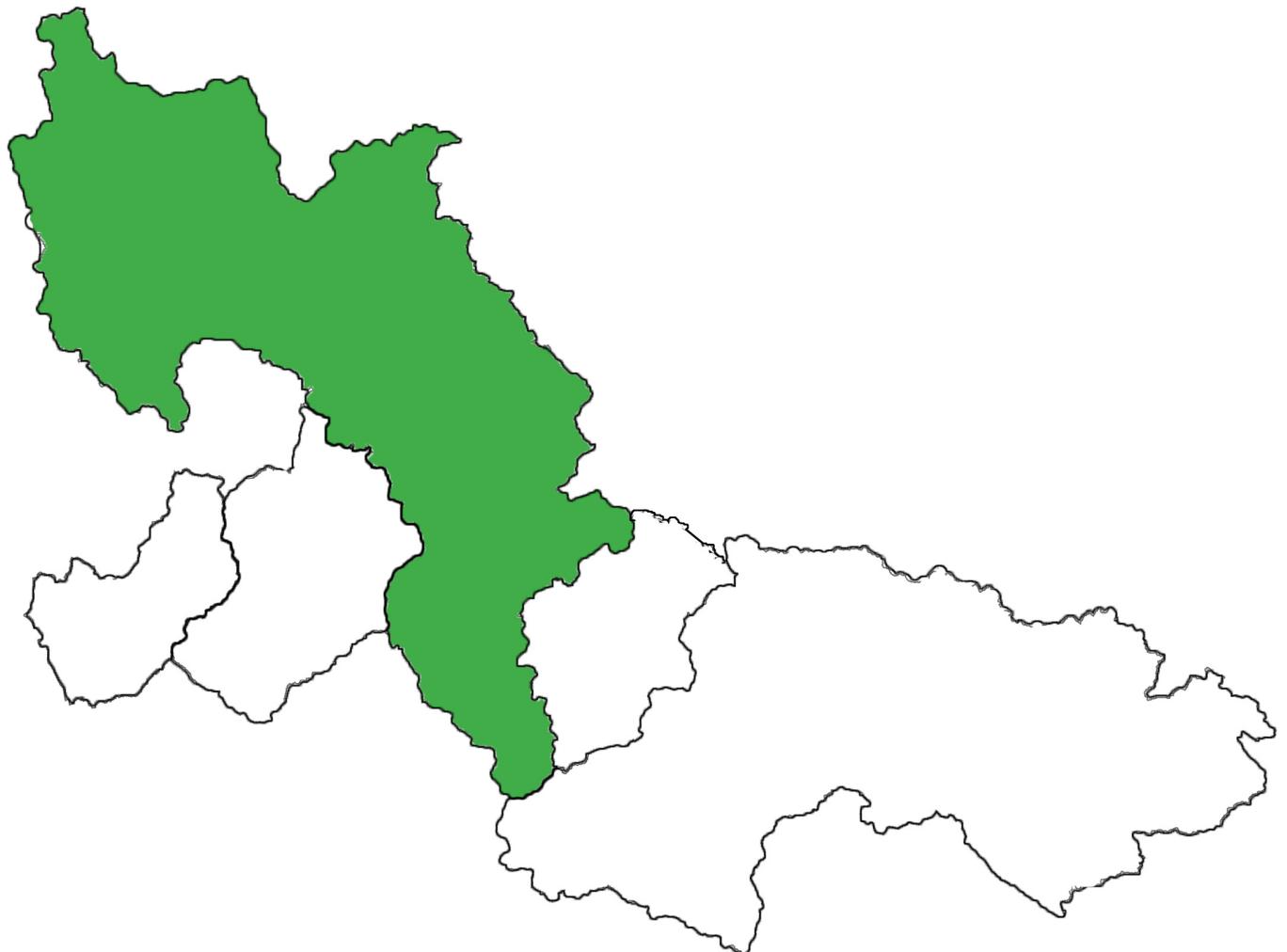


# **Section 5.5**

## **Verde River Basin**



### 5.5.1 Geography of the Verde River Basin

The Verde River Basin, located in the northern and central part of the planning area is the largest basin in the planning area at 5,661 square miles. Geographic features and principal communities are shown on Figure 5.5-1. The basin is characterized by mid-elevation mountain ranges and valleys with high elevation areas along its north central boundary. Vegetation types include Sonoran desertscrub, semidesert grassland, chaparral, woodland and montane conifer forests. Riparian vegetation is found along streams including mixed broadleaf and mesquite along the Verde River and mixed broadleaf along other streams such as West Clear Creek, Wet Beaver Creek and Oak Creek.

- Principal geographic features shown on Figure 5.5-1 are:
  - Principal basin communities of Cottonwood, Camp Verde, Clarkdale, Payson and Sedona
  - Other communities of Ash Fork, Bellemont, Jerome, Lake Montezuma, Munds Park, Paulden, Pine, Seligman, Strawberry and Sunflower
  - Verde River beginning from south of Paulden and running southeast through the basin and the communities of Clarkdale, Cottonwood and Camp Verde
  - Notable tributaries to the Verde River include Sycamore Creek, which joins the Verde River north of Clarkdale; Oak Creek, which joins the Verde River south of Cottonwood; Wet Beaver Creek and West Clear Creek, which join the Verde River near Camp Verde; and Fossil Creek and East Verde River, which join the Verde River west of Strawberry and Pine
  - Big Chino Wash in the northwestern portion of the basin entering the basin at the northernmost basin boundary and exiting south of Paulden
  - Horseshoe Reservoir on the Verde River northwest of Sunflower and Bartlett Reservoir on the Verde west of Sunflower
  - Stoneman Lake southeast of Munds Park near the Yavapai and Coconino County boundary
  - Chino Valley in the northwestern portion of the basin, extending from Seligman to Paulden
  - Verde Valley in the center of the basin around Clarkdale and Cottonwood
  - Bloody Basin in the southwestern portion of the basin west of Payson
  - Big Black Mesa southwest of Ash Fork
  - Garland Prairie south of Bellemont
  - Mogollon Rim east of Strawberry and Pine along the Gila County boundary
  - Juniper Mountains on the northwestern basin boundary
  - Mingus Mountain on the western basin boundary south of Jerome
- Not well shown on the Figure 5.5-1 are
  - The Mazatzal Mountains in the southern portion of the basin
  - Humphreys Peak, the highest point in the basin at 12,633 feet, on the north central basin boundary northeast of Bellemont
  - The Black Hills, west of Camp Verde along the basin boundary

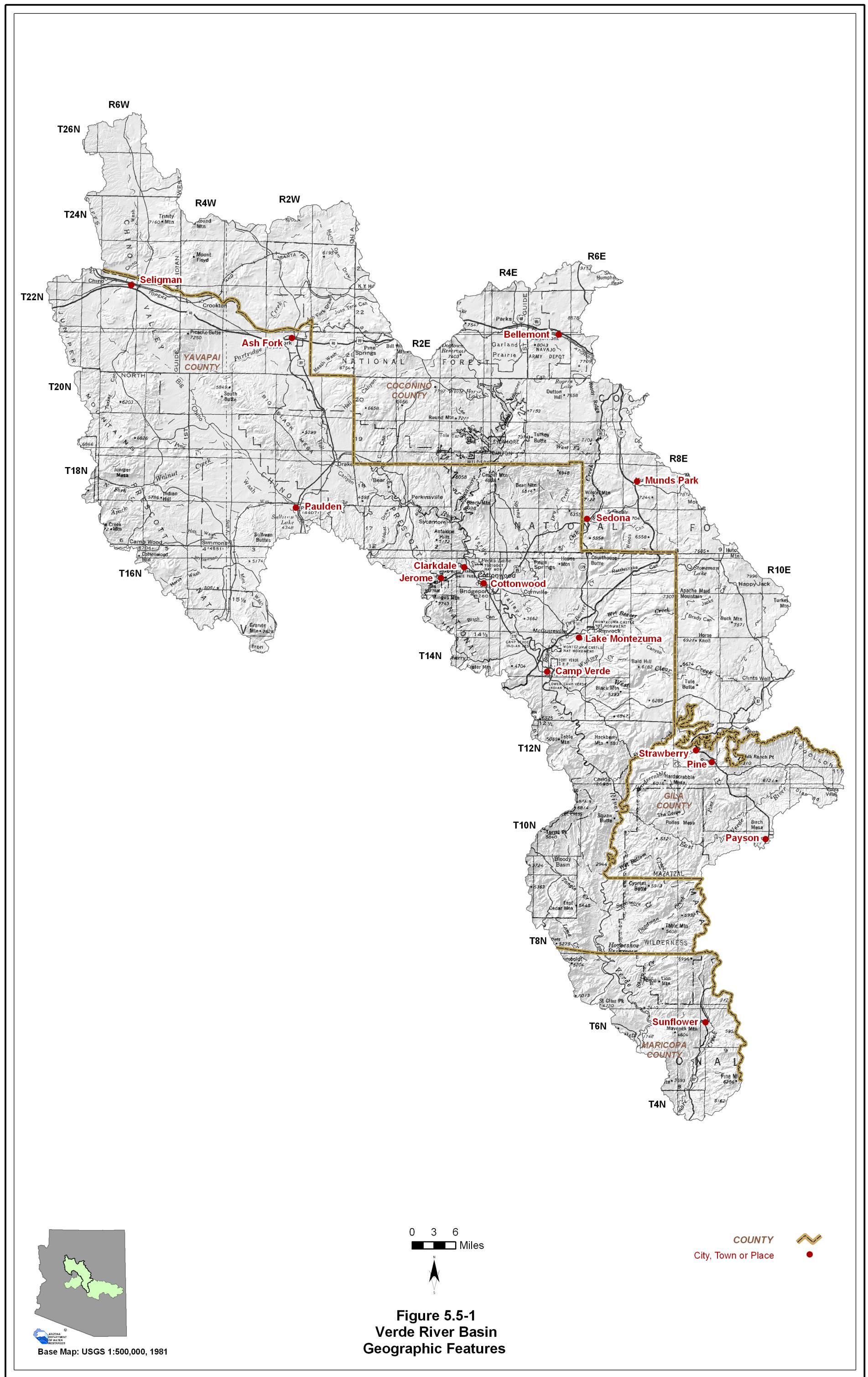


Figure 5.5-1  
Verde River Basin  
Geographic Features



Base Map: USGS 1:500,000, 1981

## 5.5.2 Land Ownership in the Verde River Basin

Land ownership, including the percentage of ownership by category, for the Verde River Basin is shown in Figure 5.5-2. Principal features of land ownership in this basin are the large contiguous parcels of forest service lands and the relatively large portion of private land. A description of land ownership data sources and methods is found in Volume 1, Section 1.3.8. Land ownership categories are discussed below in the order of percentage from largest to smallest in the basin.

### National Forest and Wilderness

- 71.3% of the land is federally owned and managed as National Forest and Wilderness.
- Forest lands in the basin are part of the Prescott, Kaibab, Coconino and Tonto National Forests.
- The basin contains approximately 434,000 acres in eleven wilderness areas. The 57,916-acre Sycamore Canyon Wilderness is located in the Prescott, Kaibab and Coconino National Forests. Coconino National Forest wilderness areas include: the 48,263-acre Red Rock Secret Mountain Wilderness, 18,069-acre Munds Mountain Wilderness, 6,178-acre Wet Beaver Creek Wilderness, 15,267-acre West Clear Creek Wilderness and the 10,400-acre Fossil Creek Wilderness. Prescott National Forest wilderness areas include: 7,708-acre Juniper Mesa Wilderness, 5,553-acre Woodchute Wilderness, 9,747-acre Granite Mountain Wilderness and most of the 5,488-acre Apache Creek Wilderness. Most of the 250,053-acre Mazatzal Wilderness in the Tonto National Forest is located in the southern part of the basin.
- There are numerous small private in-holdings in all forests.
- National forest land is located throughout the basin.
- Land uses include recreation, grazing and timber production.

### Private

- 20.2% of the land is private.
- The majority of the private land in the basin is in a checkerboard pattern in the northwestern portion of the basin. There are also parcels of private land in the vicinity of Cottonwood, Camp Verde and Sedona.
- Land uses include domestic, commercial, mining, farming and ranching.

### State Trust Land

- 7.4% of the land in this basin is held in trust for the public schools and many other beneficiaries under the State Trust Land system.
- The majority of state land is located in a checkerboard pattern in the northwestern portion of the basin interspersed with private lands. State lands are also located in the vicinity of Clarkdale and south of the Navajo Army Depot.
- Primary land use is grazing.

### U.S. Military

- 0.7% of the land is federally owned and operated by the U.S. Military as the Navajo Army Depot located in the vicinity of Bellemont in the northeastern portion of the basin.
- Land uses include National Guard training and army equipment storage.

### **Indian Reservation**

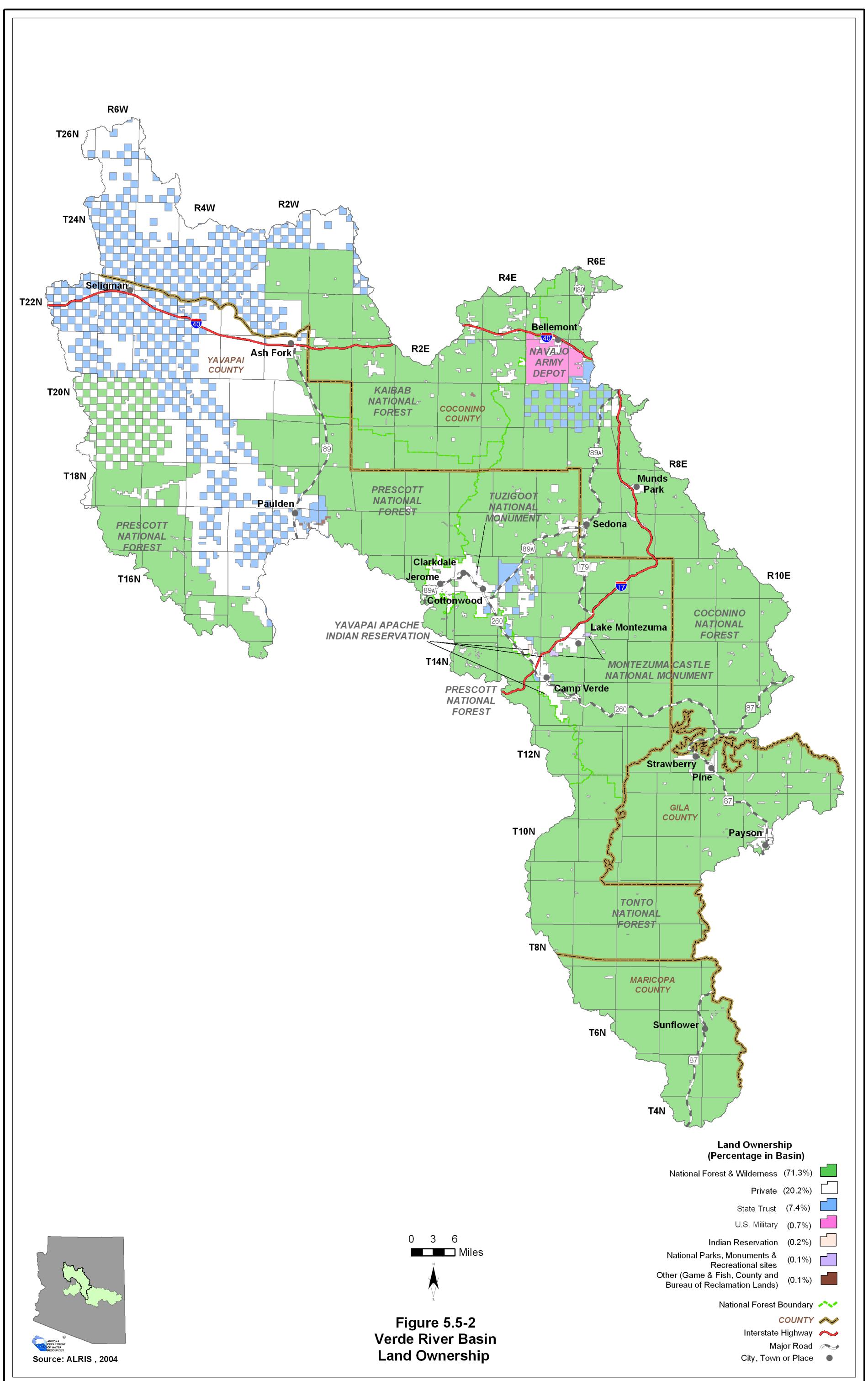
- 0.2% of the land is under ownership of the Yavapai Apache Tribe.
- Tribal lands are composed of five separate parcels located in the vicinity of Camp Verde.
- Land uses include domestic and commercial.

### **National Parks, Monuments and Recreation Areas**

- 0.1% of the land is federally owned and managed by the National Park Service as the Montezuma Castle National Monument located near Interstate 17 in the center of the basin.
- Land uses include cultural preservation and recreation.

### **Other (Game and Fish, County and Bureau of Reclamation Lands)**

- 0.1% of the land is owned and managed by the Arizona Game and Fish Department as the Upper Verde River Wildlife Area located in the vicinity of Paulden.
- Land uses include wildlife preservation and recreation.



### 5.5.3 Climate of the Verde River Basin

Climate data from NOAA/NWS Co-op Network, AZMET and SNOTEL/Snowcourse stations are complied in Table 5.5-1 and the locations are shown on Figure 5.5-3. Figure 5.5-3 also shows precipitation contour data from the Spatial Climate Analysis Service (SCAS) at Oregon State University. The Verde River Basin does not contain Evaporation Pan stations. A description of the climate data sources and methods is found in Volume 1, Section 1.3.3.

#### NOAA/NWS Co-op Network

- Refer to Table 5.5-1A
- Elevation at the 18 NOAA/NWS Co-op network climate stations range from 2,650 feet at Childs to 7,480 feet at Happy Jack R.S.
- Minimum average temperature ranges from 27.5°F at Happy Jack R.S. to 45.6°F at Childs. Seventeen stations have minimum average temperatures between 35°F and 46°F.
- Maximum average temperature ranges from 84.5°F at Childs to 63.7°F at Happy Jack R.S. Fifteen stations have maximum average temperatures between 73°F and 85°F.
- Station precipitation ranges from an average annual precipitation of 10.55 inches at Cottonwood to 28.46 inches at Junipine.
- Most stations report the highest seasonal rainfall in the summer (July-September) and all stations report the lowest seasonal rainfall in the spring (April-June).

#### AZMET

- Refer to Table 5.5-1C
- There is one AZMET station in the basin at Payson.
- The station is at 4,849 feet and reported an average annual reference evapotranspiration of 59.48 inches based on one year of record.

#### SNOTEL/Snowcourse

- Refer to table 5.3-1D
- There are 14 snow measurement sites in the basin. Five stations have been discontinued.
- The site elevation ranges from 6,120 feet at Sugar Loaf Pillow SNOTEL to 7,720 feet at Williams Ski Run.
- Most sites record highest average snowpack in March. Several sites have high snowpacks in May, however, the average for these sites is based only on one year of data.
- Highest average snowpack is 12.8 inches at Baker Butte No. 2, located at 7,700 feet. Snowpack is measured in inches of snow water content. Ten inches of fresh snow can contain as little as 0.10 inches of water or up to 4 inches depending on a number of factors. The majority of U.S. snows fall with a water-to-snow ratio of between 0.04 and 0.10. (NSIDC, 2006)

#### SCAS Precipitation Data

- See Figure 5.5-3

- Additional precipitation data shows rainfall as high as 38 inches in the southern portion of the basin north of Pine. Rainfall is as low as 10 inches in the Big Chino Valley in the vicinity of Paulden.
- In general, precipitation increases as altitude increases in this basin. The range of 28 inches between highest and lowest precipitation is the largest range in the planning area.

**Table 5.5-1 Climate Data for the Verde River Basin**

**A. NOAA/NWS Co-op Network:**

Station Name	Elevation (in feet)	Period of Record Used for Averages	Average Temperature Range (in F)		Average Total Precipitation (in inches)				
			Max/Month	Min/Month	Winter	Spring	Summer	Fall	Annual
Ashfork 6N	5,310	1902-1987 <sup>1</sup>	74.0/Jul	36.1/Jan	1.91	1.42	5.37	3.98	12.69
Beaver Creek R.S.	3,820	1971-2000	80.8/Jul	43.1/Dec	5.25	1.63	5.75	4.08	16.71
Childs	2,650	1971-2000	84.5/Jul	45.6/Dec	6.67	1.56	6.40	4.90	19.53
Cottonwood	3,380	1949-1977 <sup>1</sup>	82.2/Jul	43.1/Jan	2.15	1.25	3.76	3.40	10.55
Happy Jack R.S.	7,480	1971-2000	63.7/Jul	27.5/Jan	10.05	2.96	7.92	6.60	27.53
Jerome	4,950	1971-2000	78.7/Jul	41.4/Jan	6.11	2.23	7.26	4.15	19.75
Junipine	5,130	1948-1982 <sup>1</sup>	74.4/Jul	39.0/Jan	10.69	3.25	6.92	7.60	28.46
Montezuma Castle N.M.	3,180	1971-2000	81.9/Jul	42.5/Dec	4.13	1.45	5.49	3.42	14.49
Natural Bridge	4,610	1893-1972	76.8/Jul	40.9/Jan	7.34	2.35	8.30	6.16	24.17
Oak Creek Canyon	5,080	1971-2000	73.4/Jul	39.2/Jan	11.14	2.99	7.48	6.84	28.45
Payson	4,910	1971-2000	75.4/Jul	39.9/Jan	7.35	2.18	7.20	5.34	22.01
Payson 12 NNE	5,510	1952-1976 <sup>1</sup>	70.6/Jul	36.0/Jan	7.15	3.03	9.12	8.93	28.24
Payson R.S.	4,850	1893-1974 <sup>1</sup>	73.1/Jul	36.3/Jan	4.01	1.88	5.70	7.57	19.14
Sedona R.S.	4,220	1971-2000	80.3/Jul	43.5/Jan	6.73	2.23	5.49	4.56	19.01
Seligman	5,250	1971-2000	73.5/Jul	37.1/Jan	3.67	1.41	5.13	2.61	12.82
Seligman 13 SSW	5,240	1962-1982 <sup>1</sup>	73.8/Jul	35.1/Jan	3.89	1.21	4.94	3.02	13.06
Tuzigoot	3,470	1971-2000	83.1/Jul	44.8/Dec	3.51	1.19	5.29	2.75	12.74
Walnut Creek	5,090	1971-2000	72.1/Jul	36.0/Dec	5.16	1.45	5.73	3.45	15.79

Source: WRCC, 2003.

**Notes:**

<sup>1</sup>Average temperature for period of record shown; average precipitation from 1971-2000

**B. Evaporation Pan:**

Station Name	Elevation (in feet)	Period of Record Used for Averages	Avg. Annual Evap (in inches)
None			

Source: WRCC, 2003.

**C. AZMET:**

Station Name	Elevation (in feet)	Period of Record	Average Annual Reference Evapotranspiration, in inches (number of years to calculate averages)
Payson	4,849	2003 - current	59.48 (1)

Source: Arizona Meteorological Network, 2005

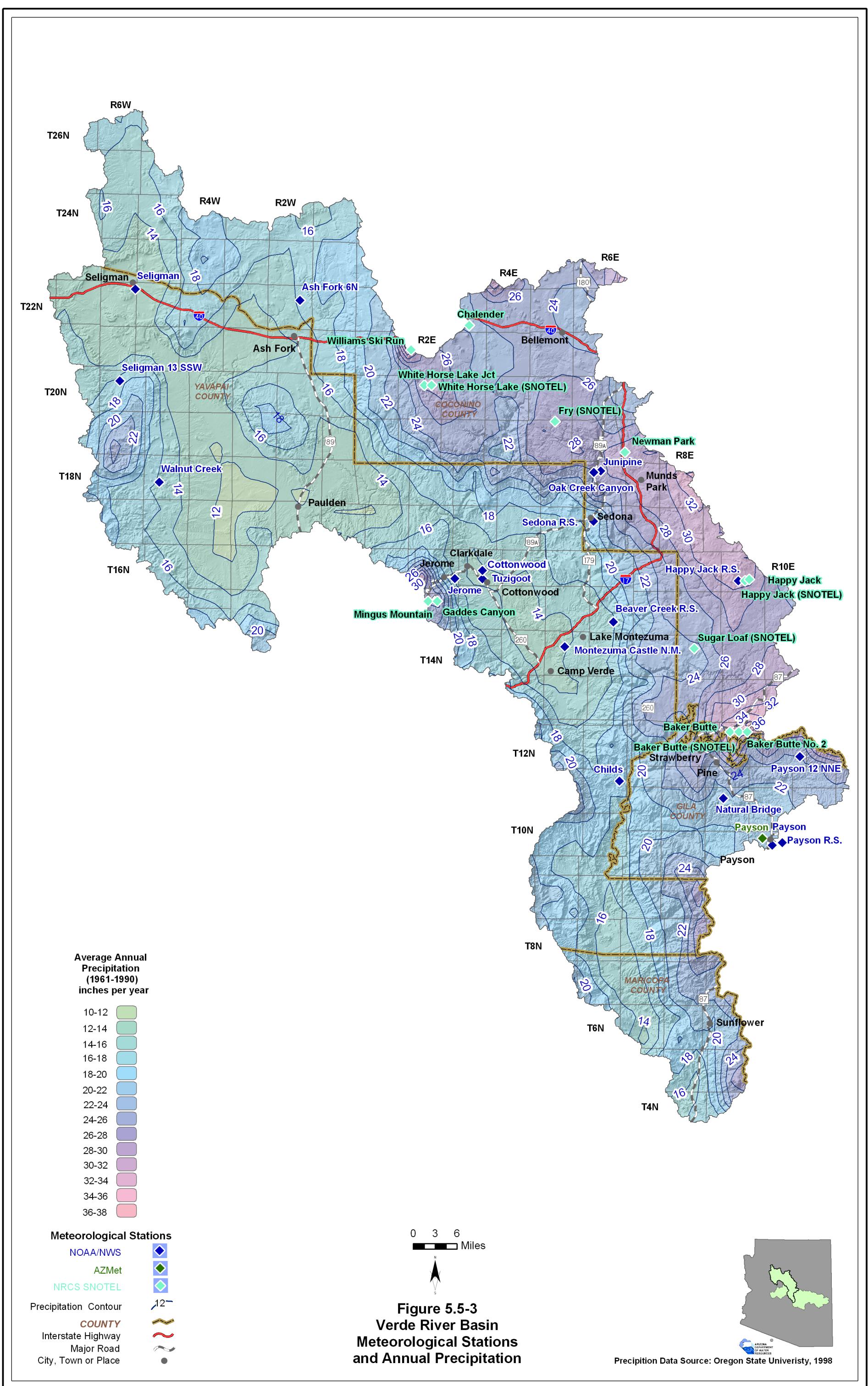
**D. SNOTEL/Snowcourse:**

Station Name	Elevation (in feet)	Period of Record Used for Averages	Average Snowpack, at Beginning of the Month, as Inches Snow Water Content (Number of measurements to calculate average)					
			Jan.	Feb.	March	April	May	June
Baker Butte	7,300	1966 - 1999 (discontinued)	2.4(32)	5.2(34)	6.3(34)	4.5(34)	12.1(1)	0(0)
Baker Butte No. 2	7,700	1972 - current	4.0(30)	7.7(33)	11.6(33)	12.8(33)	12.1(1)	0(0)
Baker Butte SNOTEL	7,300	1966 - current	2.3(36)	4.7(38)	6.0(38)	4.1(38)	0.8(22)	0(21)
Chalender	7,100	1947 - current	1.3(30)	2.6(58)	2.9(58)	1.4(58)	0.2(1)	0(0)

**Table 5.5-1 Climate Data for the Verde River Basin (cont'd)**

Station Name	Elevation (in feet)	Period of Record Used for Averages	Average Snowpack, at Beginning of the Month, as Inches Snow Water Content <i>(Number of measurements to calculate average)</i>					
			Jan.	Feb.	March	April	May	June
Fry SNOTEL	7,200	1983 - current	2.7(21)	4.6(21)	5.8(21)	2.1(21)	0(21)	0(0)
Gaddes Canyon	7,600	1954 - 1989 (discontinued)	2.6(10)	4.0(36)	5.4(36)	5.1(35)	0(0)	0(0)
Happy Jack	7,630	1951 - current	1.9(32)	3.3(52)	4.1(53)	2.4(50)	6.6(1)	0(0)
Happy Jack SNOTEL	7,630	2000 - current	1.5(5)	2.5(5)	3.3(5)	0.2(5)	0(5)	0(5)
Mingus Mountain	7,100	1947 - 1989 (discontinued)	0.9(9)	1.9(46)	1.0(45)	0.4(42)	0(0)	0(0)
Newman Park	6,750	1963 - current	1.2(31)	2.(42)	2.2(42)	0.8(42)	0.3(1)	0(0)
Sugar Loaf SNOTEL	6,120	1983-1999 (discontinued)	0.1(16)	0.3(16)	0.5(15)	0(16)	0(17)	0(17)
White Horse Lake Jct	7,180	1967 - 1999 (discontinued)	1.4(25)	3.1(31)	3.8(33)	2.1(33)	0.9(33)	0(0)
White Horse Lake SNOTEL	7,180	1967 - current	1.8(31)	3.6(36)	4.9(38)	2.6(38)	0.2(25)	0(22)
Williams Ski Run	7,720	1967 - current	2.9(21)	5.8(38)	8.3(38)	8.7(37)	0(0)	0(0)

Source: NRCS, 2005



#### 5.5.4 Surface Water Conditions in the Verde River Basin

Streamflow data, including average seasonal flow, average annual flow and other information is shown in Table 5.5-2. Flood ALERT equipment in the basin is shown in Table 5.5-3. Reservoir and stockpond data, including maximum storage or maximum surface area, are shown in Table 5.5-4. The location of streamflow gages identified by USGS number, flood ALERT equipment, USGS runoff contours and large reservoirs are shown on Figure 5.3-4. A description of stream data sources and methods is found in Volume 1, Section 1.3.16. A description of reservoir data sources and methods is found in Volume 1, Section 1.3.11. A description of stockpond data sources and methods is found in Volume 1, Section 1.3.15.

##### Streamflow Data

- Refer to Table 5.5-2.
- Data from 36 stations located at 22 watercourses are shown in the table and on Figure 5.5-4. Twenty-one of the 36 stations have been discontinued and 13 of the stations are real-time stations.
- The average seasonal flow at all stations but one is highest in the winter (January-March) when between 37% and 71% of the average annual flow occurs. The average seasonal flow is lowest at most stations in the summer (July-September) when between 1% and 24% of the average annual flow occurs.
- Maximum annual flows range from 1,583,014 acre-feet (1993, Verde River below Tangle Creek above Horseshoe Dam) to 376 acre-feet (1991, Rocky Gulch near Rimrock). Minimum annual flows range from seven acre-feet (1964, East Fork Sycamore Creek near Sunflower) to 258,525 acre-feet (1939, Verde River below East Verde River near Childs).
- Seventeen streams in this basin have a mean annual flow of over 10,000 acre-feet. One river, Verde River, has a mean annual flow of over 100,000 acre-feet.

##### Flood ALERT Equipment

- Refer to Table 5.5-3.
- As of October 2005 there were 41 stations in the basin. Stations are in Maricopa, Yavapai and Coconino Counties, however, all stations in Coconino County are operated by Yavapai County Flood Control District and one station in Yavapai County is operated by Maricopa County Flood Control District.
- Of the 41 stations, 25 are precipitation only stations, seven are precipitation/stage stations, four are weather stations, three are repeater/precipitation stations and two are repeater/weather stations.

##### Salt River Project (SRP) Low-Flow Gages

- Refer to Table 5.5-3a
- There are three SRP low-flow gages in this basin. These gages are a project of SRP, Prescott National Forest and Arizona Game and Fish designed to provide real-time information to the public about the Verde River streamflow.

##### Reservoirs and Stockponds

- Refer to Table 5.5-4.

- The basin contains 13 large reservoirs. The largest, Bartlett, has a maximum storage of 178,186 acre-feet.
- The most common use of the reservoirs is for fire protection, stock or farm pond. Other uses include recreation, irrigation, water supply, flood control and other. Bartlett and Horseshoe store water for use in the Phoenix metropolitan area.
- Surface water is stored or could be stored in 59 small reservoirs in the basin.
- Total maximum storage for the 27 small reservoirs with greater than 15 acre-feet and less than 500 acre-feet capacity is 3,592 acre-feet. The total surface area for the remaining 32 small reservoirs is 496 acres.
- There are 2,328 registered stockponds in this basin.

#### **Runoff Contour**

- Refer to Figure 5.5-4.
- Average annual runoff is 0.1 inches per year in the northwestern portion of the basin and 1 inch in the southwestern portion of the basin. Average annual runoff increases to five inches per year in the west central portion of the basin.

**Table 5.5-2 Streamflow Data for Verde River Basin**

Station Number	USGS Station Name	Drainage Area (in mi <sup>2</sup> )	Mean Basin Elevation (in feet)	Period of Record	Average Seasonal Flow (% of annual flow)			Annual Flow (in acre-feet/year)			Years of Annual Flow Record	
					Winter	Spring	Summer*	Fall	Minimum	Median		
9403990	Dogtown Wash above Dogtown Reservoir near Williams	4.7	NA	2/1964-5/1965 (discontinued)	No statistics run; less than 3 years of data							
9502800	Williamson Valley Wash near Paulden	255	5,120	3/1965-current (real-time)	64	7	10	19	770 (2002)	2,064	5,199	22,959 (1980) 20
9503700	Verde River near Paulden	2,507	5,410	7/1963-current (real-time)	46	16	16	19	16,511 (2002)	20,783	30,743	156,19 (1993) 39
9503720	Heil Canyon near Williams	15	7,110	8/1965-9/1972 (discontinued)	49	6	8	37	123 (1987)	1,444	2,316	5,017 (1966) 6
9503800	Volunteer Wash near Belmont	131	7,620	8/1965-9/1972	59	7	1	33	61 (1987)	1,792	2,709	6,719 (1966) 6
9504000	Verde River near Clarkdale	3,124	5,490	6/1915-current (real-time)	50	16	14	20	54,529 (2002)	104,279	128,062	458,393 (1993) 40
9504420	Oak Creek near Sedona	233	NA	10/1981-current (real-time)	54	18	10	17	22,587 (2002)	46,298	58,873	164,776 (1993) 21
9504430	Oak Creek at Sedona	233	NA	10/1981-9/1985 (discontinued)	58	16	9	18	24,108 (1989)	53,792	67,074	165,067 (1993) 13
9504500	Oak Creek near Cornville	355	6,200	7/1940-current (real-time)	50	20	9	21	21,357 (1986)	51,402	61,972	182,440 (1978) 56
9505000	Verde River at Camp Verde	3,849	NA	1/1913-3/1920 (discontinued)	55	20	12	14	149,139 (1913)	309,138	305,312	545,879 (1916) 7
9505200	Wet Beaver Creek near Rimrock	111	6,410	10/1961-current (real-time)	55	22	8	15	5,489 (1977)	18,176	23,659	64,667 (1993) 33
9505220	Rocky Gulch near Rimrock	1	7,190	10/1985-9/1992 (discontinued)	66	25	4	6	62 (1989)	210	215	376 (1991) 4
9505250	Red Tank Draw near Rimrock	48	5,910	4/1957-9/1978, (discontinued)	58	16	4	22	33 (1983)	3,183	4,666	22,304 (1965) 20
9505300	Rattlesnake Canyon near Rimrock	25	6,560	6/1957-9/1980, (discontinued)	59	22	2	17	101 (1983)	4,345	5,763	21,652 (1965) 22
9505350	Dry Beaver Creek near Rimrock	142	6,220	10/1960-current (real-time)	61	21	3	15	253 (1986)	21,978	31,271	105,727 (1978) 42
9505500	Beaver Creek at Camp Verde	433	NA	12/1912-3/1920 (discontinued)	64	21	6	9	26,715 (1913)	64,072	70,274	132,488 (1915) 6
9505550	Verde River below Camp Verde	4,288	5,544	11/1971-11/1981 (discontinued)	42	24	7	27	67,620 (1977)	192,578	267,706	603,073 (1978) 7
9505800	West Clear Creek near Camp Verde	241	6,680	12/1964- current (real-time)	54	20	8	18	11,152 (2002)	34,542	45,858	133,245 (1993) 38

**Table 5.5-2 Streamflow Data for Verde River Basin (cont'd)**

Station Number	USGS Station Name	Drainage Area (in mi <sup>2</sup> )	Mean Basin Elevation (in feet)	Period of Record	Average Seasonal Flow (% of annual flow)			Annual Flow (in acre-feet/year)			Years of Annual Flow Record	
					Winter	Spring	Summer	Fall	Minimum	Median		
9506000	Verde River near Camp Verde	4,644	5,560	4/1934-current (real-time)	59	17	11	14	95,934 (2002)	222,679	299,621 (1993)	980,650 (1993) 24
9507600	East Verde River near Pine	6	6,430	9/1961-9/1971 (discontinued)	26	32	24	19	521 (1963)	10,208	8,860 (1968)	16,507 (1968) 9
9507700	Webber Creek above West Fork Webber Creek near Pine	5	6,980	7/1959-9/1974 (discontinued)	37	36	7	20	478 (1967)	1,814	1,876 (1965)	4,547 (1965) 14
9507800	West Fork Webber Creek near Pine	4	NA	7/1959-9/1965 (discontinued)	51	36	4	9	181 (1963)	348	586 (1962)	1,115 (1962) 5
9507900	Webber Creek below WF Webber Creek near Pine	10	NA	7/1959-9/1965 (discontinued)	46	40	6	9	557 (1963)	1,050	1,775 (1960)	3,224 (1960) 5
9507950	East Verde River near Payson	272	NA	7/1961-9/1965 (discontinued)	50	33	16	2	4,684 (1964)	10,425	9,211 (1962)	12,544 (1962) 3
9507980	East Verde River near Childs	331	5,140	9/1961-current (real-time)	59	16	10	15	1,499 (2002)	34,036	46,674 (1993)	208,586 (1993) 38
9508000	Verde River below East Verde River near Childs	5,241	NA	6/1934-current	67	13	9	11	258,525 (1999)	395,733	444,220 (1993)	733,574 (1993) 6
9508300	Wet Bottom Creek near Wet Childs	36	4,810	10/1967-current (real-time)	71	6	5	18	87 (2002)	8,471	10,182 (1978)	37,864 (1978) 35
9508500	Verde River below Tangle Creek above Horseshoe Dam	5,493	5,470	8/1945-current (real-time)	51	17	11	20	131,073 (2002)	294,733	409,875 (1993)	1,583,014 (1993) 57
9509000	Verde River at Bartlett Reservoir near Cave Creek	6,065	NA	10/1938-12/1945 (discontinued)	48	25	11	16	245,128 (1942)	381,536	434,387 (1941)	1,036,012 (1941) 7
9510070	West Fork Sycamore Creek above McFar Canyon near Sunflower	5	5,430	10/1966-5/1986 (discontinued)	60	12	4	24	27 (1971)	623	816 (1983)	2,121 (1983) 10
9510080	West Fork Sycamore Creek near Sunflower	10	5,260	10/1961-9/1974 (discontinued)	54	13	6	26	50 (1971)	923	1,573 (1973)	4,503 (1973) 12
9510100	East Fork Sycamore Creek near Sunflower	4	5,760	10/1961-5/1986 (discontinued)	69	13	4	14	7 (1964)	308	678 (1980)	2,302 (1980) 22
9510150	Sycamore Creek near Sunflower	52	4,260	10/1961-9/1976 (discontinued)	47	14	6	34	297 (1964)	2,881	5,476 (1965)	18,244 (1965) 14
9510170	Camp Creek near Sunflower	3	NA	8/1963-9/1966 (discontinued)	No statistics run; less than 3 years of data							2
9510180	Rock Creek near Sunflower	15	3,680	3/1963-9/1972 (discontinued)	44	7	12	38	109 (1971)	999	1,227 (1965)	4,474 (1965) 8
9510200	Sycamore Creek near Fort McDowell	164	3,820	12/1960-current (real-time)	70	11	3	17	41 (2002)	8,290	19,584 (1993)	111,493 (1993) 42

Sources: USGS/NWIS, USGS 1998 and USGS 2003.

**Notes:**

Statistics based on Calendar Year

Annual Flow statistics based on monthly values

Summation of Average Annual Flows may not equal 100 due to rounding.

Period of record may not equal Year of Record used for annual Flow/year statistics due to only using years with a 12 month record

NA = Not available

**Table 5.5-3 Flood Alert Equipment in the Verde River Basin**

Station ID	Station Name	Station Type	Install Date	Responsibility
105	Metz Mountain	Precipitation	7/14/1994	Yavapai County FCD
110	Woody Mountain	Precipitation	7/12/1993	Yavapai County FCD
115	Kelly Pocket	Precipitation	7/13/1993	Yavapai County FCD
120	Red Hill	Precipitation	7/3/1993	Yavapai County FCD
125	Small Tank	Precipitation	7/2/1993	Yavapai County FCD
130	Coyote Park	Precipitation	7/11/1993	Yavapai County FCD
135	Bear Seep	Precipitation	7/14/1993	Yavapai County FCD
140	Munds Park	Precipitation/Stage	7/9/1993	Yavapai County FCD
145	Pumphouse Wash	Precipitation/Stage	11/12/1997	Yavapai County FCD
150	Sedona Airport	Weather Station	7/2/1993	Yavapai County FCD
155	West Fork Oak Creek	Precipitation/Stage	11/12/1997	Yavapai County FCD
160	Oak Creek @ Tlaquepaque	Precipitation/Stage	11/12/1997	Yavapai County FCD
165	ADOT Rim Camp	Precipitation	7/9/1993	Yavapai County FCD
175	Dry Creek Levee	Precipitation/Stage	8/28/2001	Yavapai County FCD
180	Merry-Go-Round	Precipitation	3/23/2005	Yavapai County FCD
185	Chick Road Detention Pond	Precipitation/Stage	12/15/2000	Yavapai County FCD
193	Mingus Mountain Repeater	Repeater/Weather Station	8/22/1997	Yavapai County FCD
240	Jacks Point	Precipitation	7/27/2004	Yavapai County FCD
250	Jacks Canyon	Precipitation	7/19/2004	Yavapai County FCD
260	House Mountain	Precipitation	7/14/2004	Yavapai County FCD
370	Summit Mountain	Precipitation	5/6/1997	Yavapai County FCD

**Table 5.5-3 Flood Alert Equipment in the Verde River Basin (cont'd)**

Station ID	Station Name	Station Type	Install Date	Responsibility
375	Happy Jack	Precipitation	5/6/1997	Yavapai County FCD
410	Walnut Creek @ Williamson Valley Rd	Precipitation/Stage	8/27/2001	Yavapai County FCD
415	Sycamore Point	Precipitation	8/28/2001	Yavapai County FCD
420	White Hills	Precipitation	7/15/2004	Yavapai County FCD
425	Yavapai County Verde Roads Yard	Precipitation	11/19/1997	Yavapai County FCD
430	Cottonwood Public Works Yard	Weather Station	8/21/2001	Yavapai County FCD
460	Apache Maid	Precipitation	4/17/2000	Yavapai County FCD
465	Buck Mountain	Precipitation	7/13/2000	Yavapai County FCD
470	Lee Butte	Precipitation	12/4/2000	Yavapai County FCD
485	Cedar Flat	Precipitation	8/1/2001	Yavapai County FCD
490	Calloway Butte	Precipitation	4/28/2000	Yavapai County FCD
495	Baker Butte	Precipitation	8/29/2001	Yavapai County FCD
3800	Hyde Mountain Repeater	Repeater/Precipitation	4/13/2005	Yavapai County FCD
3805	Williamson Valley Fire Department	Precipitation	6/16/2005	Yavapai County FCD
3825	Big Chino Wash @ SR 89	Precipitation/Stage	4/1/2005	Yavapai County FCD
3850	Bill Williams Repeater	Repeater/Precipitation	9/20/2005	ADWR
4940	Humboldt Mountain Repeater	Repeater/Weather Station	7/14/1981	Maricopa County FCD
4950	Seven Springs	Precipitation	11/12/1981	Maricopa County FCD
5890	Horseshoe Lake	Weather Station	9/11/2000	Maricopa County FCD
5910	Bartlett Lake	Weather Station	8/31/2000	Maricopa County FCD

FCD = Flood Control District

ADWR = Arizona Department of Water Resources

**Table 5.5-3 a. SRP Low Flow Gages in the Verde River Basin**

Map Key	Station Name	Gauge Type	Install Date	Upper Flow Limit (cfs)
a	Verde Headwaters	Critical Depth Flume	4/2004	100
b	Verde at Black Bridge	Radar based level sensor	9/2001	150
c	Verde Falls	Low Flow Gage	6/2001 (destroyed spring 2004 and reinstalled summer 2006)	150

**Table 5.5-4 Reservoirs and Stockponds in the Verde Basin**

**A. Large Reservoirs (500 acre-feet capacity and greater)**

MAP KEY	RESERVOIR/LAKE NAME (Name of dam, if different)	OWNER/OPERATOR	MAXIMUM STORAGE (AF)	USE <sup>1</sup>	JURISDICTION
1	Barlett	Bureau of Reclamation	178,186	R,S	Federal
2	Horseshoe	Bureau of Reclamation	131,500	I,S	Federal
3	Hells Canyon Tank (Hell Canyon)	AZ Dept. of Transportation	1,545	P	State
4	Wineglass Ranch	AZ Land Dept	1,226	P	State
5	Railroad Embarkment	Atchison, Topeka, & Santa Fe RR	1,000	C	State
6	Padre Reservoir (Pan Dam)	Atchison, Topeka, & Santa Fe RR	760	O	State
7	Canyon Mouth	Atchison, Topeka, & Santa Fe RR	600	O	State

**B. Other Large Reservoirs (50 acre surface area or greater)<sup>2</sup>**

MAP KEY	RESERVOIR/LAKE NAME (Name of dam, if different)	OWNER/OPERATOR	MAXIMUM SURFACE AREA (acres)	USE <sup>1</sup>	JURISDICTION
8	Rogers <sup>3</sup>	Coconino NF	1,134	P	Federal
9	Stoneman	Coconino NF	220	P	Federal
10	Unnamed <sup>4</sup>	Private	94	P	NA
11	Little Red Lake <sup>4</sup>	Private	85	P	NA
12	Horse <sup>4</sup>	Private	83	P	NA
13	Duck	Private	50	P	NA

**C. Small Reservoirs (greater than 15 acre-feet and less than 500 acre-feet capacity)**

Total number: 27

Total maximum storage: 3,592 acre-feet

**D. Other Small Reservoirs (between 5 and 50 acres surface area)<sup>2</sup>**

Total number: 32

Total surface area: 496 acres

**E. Stockponds (up to 15 acre-feet capacity)**

Total number: 2,328 (from water right filings)

**Notes:**

NA = Not applicable

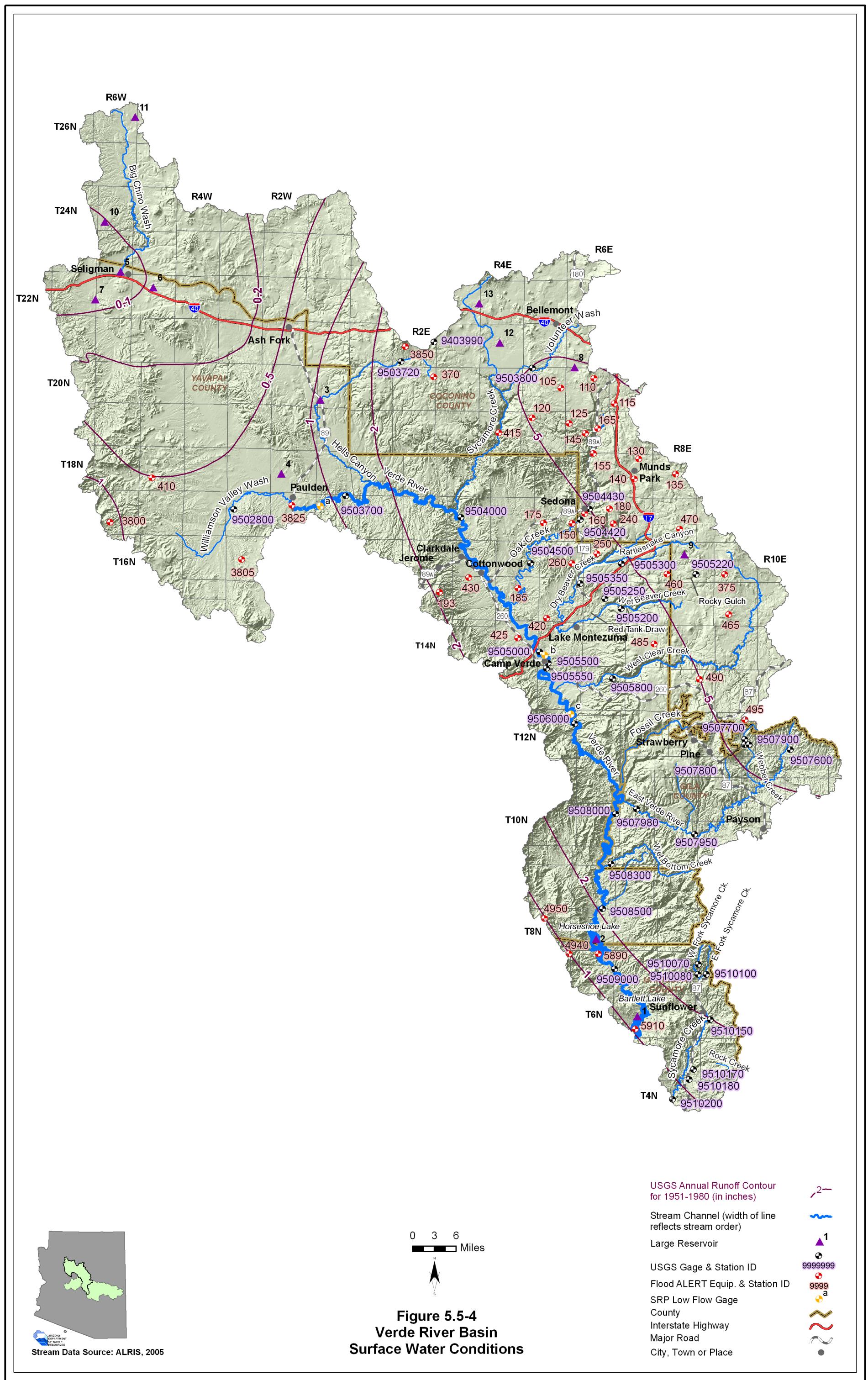
<sup>1</sup>C=flood control; F=fish & wildlife pond; I=irrigation; O=other; P=fire protection, stock or farm pond

R=recreation; S=water supply

<sup>2</sup>Capacity data not available to ADWR

<sup>3</sup>Intermittent Lake

<sup>4</sup>Dry Lake



### 5.5.5 Perennial/Intermittent Streams and Major Springs in the Verde River Basin

Major and minor springs with discharge rates and date of measurement, and the total number of springs in the basin are shown in Table 5.5-5. The locations of major springs and perennial and intermittent streams are shown on Figure 5.5-5. A description of data sources and methods for intermittent and perennial reaches is found in Volume 1, 1.3.16. A description of spring data sources and methods is found in Volume 1, Section 1.3.14.

- Perennial streams are located throughout most of the basin and include the Verde River, Oak Creek, Fossil Creek, East Verde Creek, West Clear Creek, Wet Beaver Creek, Deadman Creek and Sycamore Creek. These streams are perennial for all or most of their length.
- Intermittent streams are found throughout the basin except for the northwestern portion of the basin.
- There are 101 major springs with a measured discharge of 10 gallons per minute (gpm) or greater at any time, the largest number reported in any groundwater basin in Arizona.
- Listed discharge rates may not be indicative of current conditions. Many of the measurements were taken during or prior to 1981.
- Most springs are located in the western portion of the basin with large concentrations of springs in the Lower Oak Creek Area, Upper Oak Creek Area and in the vicinity of Strawberry and Pine. The greatest discharge rate was measured at Fossil Creek Spring, 21,647 gpm.
- Forty of the major springs have a measured discharge rate of 100 gpm or greater and nine springs have discharge rates of 1,000 gpm or greater.
- Springs with measured discharge of 1 to 10 gpm are not mapped but coordinates are given in Table 5.2-5B. There are 79 minor springs in this basin.
- The total number of springs, regardless of discharge, identified by the USGS varies from 493 to 571, depending on the database reference.

**Table 5.5-5 Springs in the Verde River Basin**

**A. Major Springs (10 gpm or greater):**

Map Key	Name	Location		Discharge (in gpm) <sup>1</sup>	Date Discharge Measured
		Latitude	Longitude		
1	Fossil Creek (multiple)	342523	1113423	21,647	During or prior to 2001
2	Big Chino	345107	1122546	8,941	During or prior to 1997
3	Bubbling Pond	344625	1115403	3,879	5/20/1968
4	Buckhorn	343340	1113108	1,000	5/28/1959
5	Unnamed	345327	1120815	2,917	7/4/1991
6	Page	344542	1115318	2,693	1/20/1975
7	Summers	345250	1120358	2,100	10/12/2003
8	Wet Beaver	344116	1113433	850-1,350 <sup>2</sup>	10/28/1999
9	Parson	345410	1120349	1,600	11/27/1999
10	Webber Canyon	341923	1112003	996	During or prior to 2002
11	Montezuma Well	343856	1114503	916	During or prior to 1990
12	Cold	342058	1111547	830	11/11/1952
13	Unnamed	345838	1114507	749	During or prior to 1949
14	Haskell	344407	1120357	600	10/24/1958
15	Lower Newell <sup>3</sup>	344438	1115332	520	2/4/1959
16	Duff	345234	1121727	449	During or prior to 1997
17	Sullivan Lake	345148	1122636	448	During or prior to 1997
18	Grotto	341859	1112026	340	5/15/1952
19	Bonito <sup>3</sup>	342410	1111238	330	11/19/1999
20	Lolo-Mai	344631	1115403	300	7/10/1974
21	Sterling # 1	350130	1114420	300	10/12/2003
22	Tree Root	344627	1115405	264	7/9/1952
23	Dude	342925	1111351	250	11/18/1999
24	Blue	343125	1114959	230	6/11/1981
25	Upper Parsnip <sup>3</sup>	342616	1112543	230	11/9/1999
26	Unnamed <sup>3</sup>	341935	1114515	220	4/21/1976
27	Unnamed <sup>3</sup>	343135	1115015	220	11/6/1980
28	Spring Creek	344633	1115511	207	10/12/2003
29	Pieper Hatchery	342602	1111527	200	10/12/2003
30	Chase <sup>3</sup>	342557	1111740	200	11/11/1999
31	Unnamed <sup>3</sup>	343138	1115035	190	6/9/1981
32	Spider John	345300	1120422	15-85	10/27/1999
33	Thompson Pasture	345436	1114335	177	2/14/1952
34	Big	341854	1112037	175	5/15/1952
35	Turtle Pond	344627	1115404	160	12/10/1952
36	Indian Gardens	345439	1114336	115	2/14/1952

**Table 5.4-5 Springs in the Verde River Basin (cont'd)**

**A. Major Springs (10 gpm or greater):**

Map Key	Name	Location		Discharge (in gpm) <sup>1</sup>	Date Discharge Measured
		Latitude	Longitude		
37	Sheepshead Canyon	344448	1115557	111	3/1/1974
38	Bear	343259	1112548	100	5/27/1959
39	Tonto Bridge	341918	1112716	100	10/12/2003
40	Burned house <sup>3, 4</sup>	342257	1111700	100	10/18/1952
41	Unnamed	343122	1114959	90	11/6/1980
42	Beaverhead	344251	1114701	85	6/4/1974
43	Unnamed	342221	1111709	75	10/18/1952
44	Unnamed	345316	1120734	75	6/8/1977
45	Walker Creek <sup>3</sup>	343847	1114111	75	7/10/1959
46	Banjo Bill	345739	1114509	75 <sup>2</sup>	3/6/1974
47	Nad-1	351315	1115000	64	8/2/1978
48	Unnamed	351313	1114958	64	8/2/1978
49	Unnamed	351320	1115033	60	8/9/1949
50	Page area # 1	344634	1115405	60	7/10/1974
51	Ellison Headwater	342333	1110913	60	12/1/1999
52	Gravel Plant <sup>3</sup>	344605	1120235	60	10/29/1958
53	Landon	350726	1114238	60	8/29/1979
54	Walnut	344423	1120801	52	5/10/1978
55	Unnamed	345106	1129358	50	During or prior to 1965
56	Unnamed	345832	1114546	50	8/18/1949
57	Unnamed	351324	1115045	50	8/9/1949
58	Brown	342439	1114721	50	2/3/1959
59	Pine Flat	350040	1114411	50	10/4/2002
60	Sherwood	345908	1114450	50	1/20/2000
61	Unnamed	340735	1115116	45	5/12/1976
62	Big	350929	1120448	40	6/11/1997
63	Ellison	342330	110959	40	12/1/1999
64	Twin springs	344132	1120619	40	5/10/1978
65	Clear Creek # 1	343138	1113925	30	11/17/1999
66	Lelani	345905	1114443	30	During or prior to 1949
67	Geronimo	350440	1115649	10-30 <sup>2, 5</sup>	During or prior to 2001
68	North Sycamore <sup>3</sup>	342521	1111908	30	1/12/1999
69	Sheep Bridge Hot (multiple)	340441	1114223	26	6/13/2002
70	Cave	345955	1114423	25	1/20/2000
71	Lolami	345937	1114437	25	8/17/1949
72	Woods	345211	1113723	25	12/13/1960
73	Hummingbird	345903	1114450	25	8/18/1949
74	Lo	350913	1115857	24	7/24/2002

**Table 5.5-5 Springs in the Verde River Basin (cont'd)**

**A. Major Springs (10 gpm or greater):**

Map Key	Name	Location		Discharge (in gpm) <sup>1</sup>	Date Discharge Measured
		Latitude	Longitude		
75	Catfish	343112	1115003	22	6/11/1981
76	Sterling # 2	350130	1114423	21 <sup>5</sup>	8/13/1949
77	Sterling # 3	350130	1114421	20	8/13/1949
78	Hutch # 1	341232	1115311	20	6/12/2002
79	Hutch # 2	341229	1115306	20	6/12/2002
80	LX	341005	1115005	20	6/13/2002
81	Stone Camp	340704	1115105	20	7/6/2002
82	Zig Zag # 1	341040	1114734	20	6/13/02
83	Mine	342903	1115107	20	1/27/1982
84	Poison	350802	1115828	20 <sup>5</sup>	8/31/1949
85	Pivot Rock	342927	1112351	20 <sup>5</sup>	12/2/1999
86	Parsnip	342600	1112553	20 <sup>5</sup>	11/9/1999
87	Clear Creek # 3	343222	1113730	20	11/17/1999
88	Clear Creek # 2	343141	1113919	15	11/17/1989
89	Unnamed	345745	1114604	15	During or prior to 1951
90	Pyle Ranch	342215	1111009	15	12/1/1999
91	Soda	343845	1114429	15	2/6/1959
92	Unnamed <sup>3</sup>	343120	1115001	13	11/6/1980
93	Little	351812	1115724	12	6/6/1979
94	Verde Hot	342119	1114233	12	6/20/02
95	Unnamed	341126	1114730	10	7/7/1976
96	Bunker Hill	345900	1115524	10	9/20/1962
97	Frey Ranch	344635	1115413	10	7/10/1974
98	Lindberg/Fulton	350629	1114313	10	7/8/1952
99	Washington Park	342526	1111600	10	10/18/1952
100	Washington	342603	1111619	10 <sup>5</sup>	4/29/1905
101	Gray	350736	1115743	10 <sup>5</sup>	9/20/1962

**B. Minor Springs (1 to 10 gpm):**

Name	Location		Discharge (in gpm) <sup>1</sup>	Date Discharge Measured
	Latitude	Longitude		
Babe's Hole	350421	1115623	8	8/10/2002
Bull Pen	343214	1114145	7	10/10/1959
Lower Lo	350906	1115854	6	10/24/2001
Cottontail	344337	1115538	5	6/9/1977

**Table 5.5-5 Springs in the Verde River Basin (cont'd)**

**B. Minor Springs (1 to 10 gpm):**

Name	Location		Discharge (in gpm) <sup>1</sup>	Date Discharge Measured
	Latitude	Longitude		
Maxwell	351657	1114746	5	6/5/1978
Unnamed	345202	1122523	5	5/2/1977
Storm Seep	350107	1123053	5	4/19/2001
Hackberry # 2	342558	1114122	5	5/31/2002
Wet Prong	342431	1114350	5	6/21/2002
Big	343228	1113724	5	11/19/1999
Unnamed	352017	1114328	5	8/17/1978
Lockwood	350248	1115147	5 <sup>6</sup>	9/20/1960
Irving High	342426	1113611	5 <sup>6</sup>	11/15/1999
Irving Low	342417	1113640	5 <sup>6</sup>	5/24/1978
Hance	343336	1114420	4	5/27/1981
Frizell Ranch (Hell's Canyon)	344443	1115511	4	2/6/1959
Picnic	340941	1114957	4	6/13/2002
Turkey	322436	1112307	4	7/27/2002
North Pasture	340750	1115127	3	6/14/2002
Red rock	342214	1112402	3	7/22/1946
Dripping(2)	342327	1112603	3	7/20/1946
Unnamed	351354	1115136	3	8/2/1978
Spitz	351537	1115823	3	6/1/1978
Oak	342102	1112822	3	08/1946
Sycamore #1B	342825	1114232	3	6/7/2002
Cottonwood	343102	1115215	3	12/13/1977
Lee	345605	1125506	2	4/20/2001
Russell	343709	1114536	2	10/12/2003
Quail	344015	1120258	2	7/11/2002
Phroney	342631	1114134	2	6/10/2000
Sycamore #1A	342830	1114230	2	6/7/2002
Sycamore # 2	342754	1114249	2	6/7/2002
Zig Zag # 2	341041	1114733	2	6/13/2002
Pine	345759	1125413	2	4/20/2001
Ash	340459	1115214	2	5/12/1976
Beaver Creek <sup>3</sup>	344044	1114108	2	4/20/1978
Buzzard	350026	1114943	2	9/20/1962
West Twin	351006	1121326	2	9/30/1976
Little Hutch # 1	341232	1115316	2	6/12/2002
Little Hutch # 2	341231	1115317	2	6/12/2002
Sheep	345458	1113214	2	6/24/2002
Ryal	343030	1115410	2	7/10/1959

**Table 5.5-5 Springs in the Verde River Basin (cont'd)**

**B. Minor Springs (1 to 10 gpm):**

Name	Location		Discharge (in gpm) <sup>1</sup>	Date Discharge Measured
	Latitude	Longitude		
Powell	343454	1120445	2	4/20/1978
Goat Camp	343748	1120141	2	4/18/1978
Hogpen	344552	1120603	2	5/4/1978
Unnamed	345606	1124002	2	7/15/1969
Surprise	343614	1123242	2	4/19/2001
Log	343606	1120420	2	6/29/2002
Rosalida	351030	1120341	2	6/11/1997
Cherry 361b	343625	1120038	2	7/11/2002
Tappen	351057	1114655	2	9/6/1949
Black	350802	1114117	1	8/1/1949
Baker	350115	1141729	1	12/2/1999
Railroad	350807	1115734	1	11/2/2001
Pine	342242	1112323	1	8/11/2002
Pfau	343622	1120012	1	7/11/2002
Trail Jct.	335838	1114021	1	7/18/2002
Kelsey	350432	1115605	1	8/6/2002
Hackberry # 1	342603	1114117	1	10/12/2003
Fuller/Strawberry	342436	1112833	1	7/24/1946
Dripping(1)	342328	1112306	1	10/11/2002
Unnamed	343154	1115035	1	10/28/1981
North Mine	342916	1115113	1	1/27/1982
Fourty Four	342905	1112217	1	1/19/2000
Unnamed	343425	1114352	1	5/27/1981
Holly	344501	1115502	1	3/1/1974
Bell Rock	344752	1114552	1	4/25/1974
Dorsey	350316	1115640	1	8/11/1949
Grassy Meadow	350014	1114402	1	8/17/1949
Aspen	350738	1114707	1	6/22/1978
Buck	351120	1120240	1	During or prior to 11/2004
Garland	351116	1115949	1	During or prior to 11/2004
Huffer	342756	1112315	1	12/2/1999
Strawberry Hollow	342346	1112814	1	7/24/46
Chasm	342643	1114942	1	7/1/2002
Rock Top	345109	1113253	1	6/27/2002
Cottonwood <sup>3, 4</sup>	342248	1112840	1	7/24/1946
Unnamed <sup>3, 4</sup>	350633	1114929	1	During or prior to 1946
Fisher (tank)	351022	1114531	1	8/18/1949

**Table 5.5-5 Springs in the Verde River Basin (cont'd)**

**C. Total number of springs, regardless of discharge, identified by USGS  
(see ALRIS, 2005 and NHD, 2006):** 493 to 571

Notes:

<sup>1</sup>Most recent measurement identified by ADWR

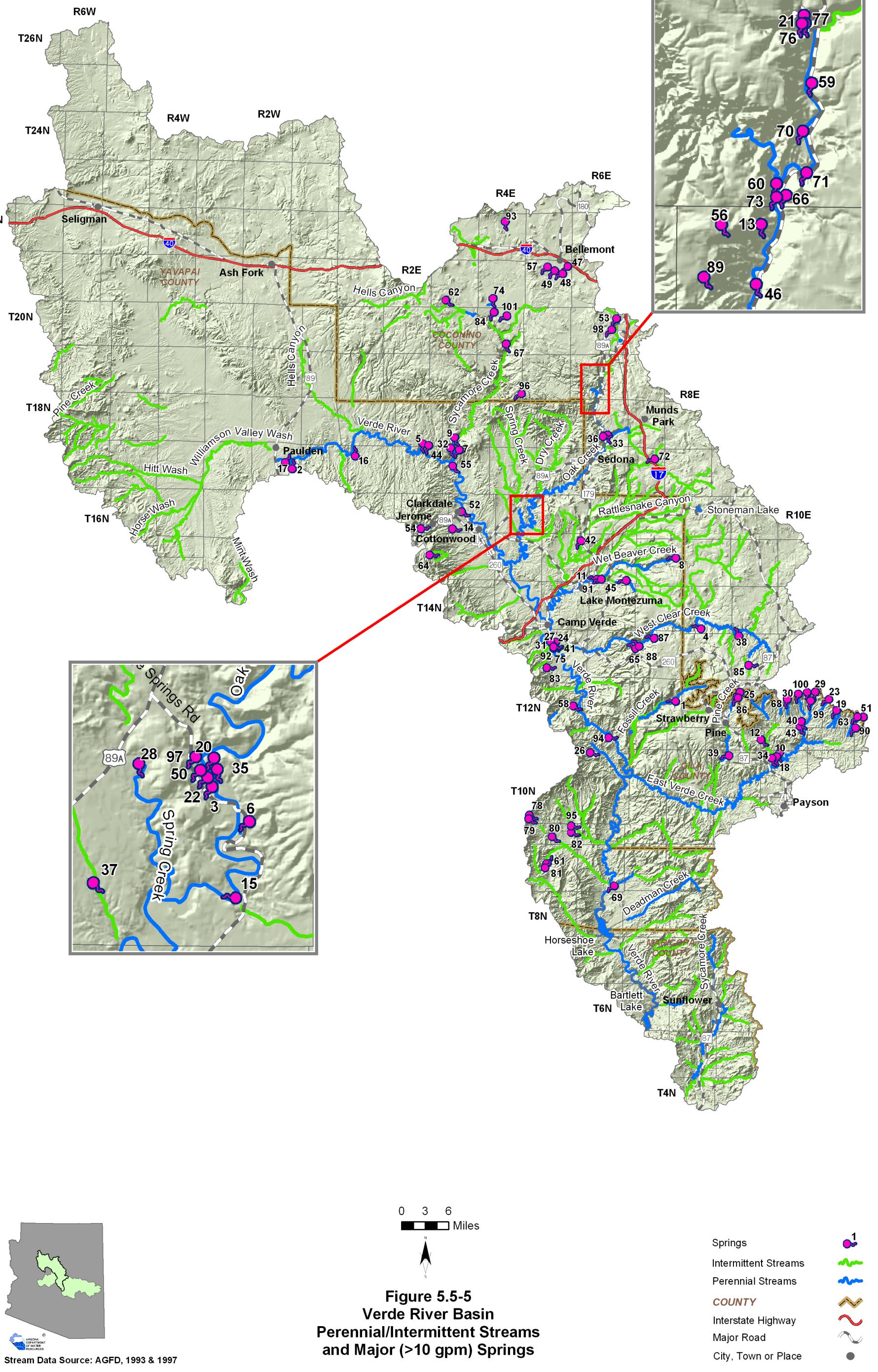
<sup>2</sup>Discharge is expressed as a range

<sup>3</sup>Spring is not displayed on current USGS topo maps

<sup>4</sup>Location approximated by ADWR

<sup>5</sup>Most recent measurement < 10gpm

<sup>6</sup>Most recent measurement < 1gpm



## 5.5.6 Groundwater Conditions of the Verde River Basin

Major aquifers, well yields, estimated natural recharge, estimated water in storage, number of index wells and date of last water-level sweep are shown in Table 5.5-6. Figure 5.5-6 shows aquifer flow direction and water-level change between 1990-1991 and 2003-2004. In the Verde Valley and Big Chino sub-basins few wells were measured in 1990-1991. Figures 5.5-6A and 5.5-6B show water level changes in these sub-basins measured in other years. Figure 5.5-7 contains hydrographs for selected wells shown on Figure 5.5-6. Figure 5.5-8 shows well yields in five yield categories. A description of aquifer data sources and methods is found in Volume 1, Section 1.3.2. A description of well data sources and methods, including water-level changes and well yields, is found in Volume 1, Section 1.3.19.

### Major Aquifers

- Refer to Table 5.5-6 and Figures 5.5-6 and 5.5-6 A and B.
- Major aquifers in the basin include the Verde formation, recent stream alluvium, basin fill carbonate aquifers and igneous and metamorphic rock.
- The basin contains three sub-basins, Big Chino, Verde Valley and Verde Canyon.
- Flow direction is generally from the north to the south following the Verde River.

### Well Yields

- Refer to Table 5.5-6 and Figure 5.5-8.
- As shown on Figure 5.5-8, well yields in this basin range from less than 100 gallons per minute (gpm) to greater than 2,000 gpm.
- One source of well yield information, based on 262 reported wells, indicates that the median well yield in this basin is 260 gpm.
- Most well yields in the basin are less than 100 gallons per minute. The highest well yields are in the vicinity of Paulden in the Big Chino sub-basin.

### Natural Recharge

- Refer to Table 5.5-6.
- There are two estimates of natural recharge for this basin ranging from 107,000 acre-feet per year to more than 138,000 acre-feet per year.
- Natural recharge in the Big Chino Sub-basin is from runoff along the mountain fronts and the major washes. Recharge in the Verde Valley Sub-basin is principally from infiltration of precipitation in the higher elevations and is estimated at 167,470 acre-feet per year (Blausch et al., 2006).

### Water in Storage

- Refer to Table 5.5-6.
- There are three estimates of water in storage for this basin ranging from 13 million acre-feet to 28 million acre-feet. The most recent estimate, from a 1990 ADWR study, indicates the basin has 28 million acre-feet in storage to a depth of 1,200 feet.
- The predevelopment storage estimate is 13 million acre-feet to a depth of 1,200 acre-feet.

### Water Level

- Refer to Figures 5.5-6 and 5.5-6 A and B. Water levels are shown for wells measured in 2003-2004.
- The Department annually measures 106 index wells in this basin.
- In 2004, the year of the last water level sweep, 681 wells were measured.
- The deepest recorded water level in the basin is 1,375 feet in the vicinity of Strawberry. There are two wells in the basin where the depth to water is only one foot, located southwest of Paulden and south and east of Bellemont.
- There are three ADWR automated groundwater level monitoring devices in this basin located near Cottonwood, Payson and .
- Hydrographs corresponding to selected wells shown on Figures 5.5-6 and 5.5-6 A and B but covering a longer time period are shown in Figure 5.5-7.

**Table 5.5-6 Groundwater Data for the Verde River Basin**

<b>Basin Area, in square miles:</b>	5,661	
<b>Major Aquifer(s):</b>	<b>Name and/or Geologic Units</b>	
	Recent Stream Alluvium	
	Basin Fill with Interbedded Volcanic Rock	
	Sedimentary Rock (Verde Formation)	
	Sedimentary Rock (C and R Aquifers)	
	Igneous and Metamorphic Rock	
<b>Well Yields, in gal/min:</b>	Range 10-2,908 Median 102 (55 wells measured)	Measured by ADWR and/or USGS
	Range 1-5,500 Median 260 (262 wells reported)	Reported on registration forms for large (> 10-inch) diameter wells
	10-1000	ADWR (1994)
	Range 0-2,500	USGS (1994)
<b>Estimated Natural Recharge, in acre-feet/year:</b>	167,470 (average for Verde Valley Sub-basin during 1990 - 2003) <sup>1</sup>	Blasch and others (2006)
	30,300 (average for Big Chino Sub-basin during 1990 - 2003) <sup>2</sup>	Blasch and others (2006)
	31,770 (Big Chino Sub-basin during 1996 and 1997) <sup>3</sup>	ADWR (2000)
	1,826 (Town of Payson only)	Southwest Groundwater Consultants (1998)
	>138,000	ADWR (1994)
	107,000	Freethey and Anderson (1986)
<b>Estimated Water Currently in Storage, in acre-feet:</b>	6,800,000 (portion of Upper Big Chino Sub-basin)	Southwest Groundwater Consultants (2005)
	10,000,000 (Big Chino Sub-basin to 1,200 feet)	McGavock (2003)
	9,230 (Pine/Strawberry area) <sup>4</sup>	ADWR (1996)
	28,000,000 (to 1,200 feet)	ADWR (1990)
	13,000,000 (to 1,200 feet)	Freethey and Anderson (1986)
	>22,000,000	Arizona Water Commission (1975)
<b>Current Number of Index Wells:</b>	106	
<b>Date of Last Water-level Sweep:</b>	2004 (681 wells measured)	

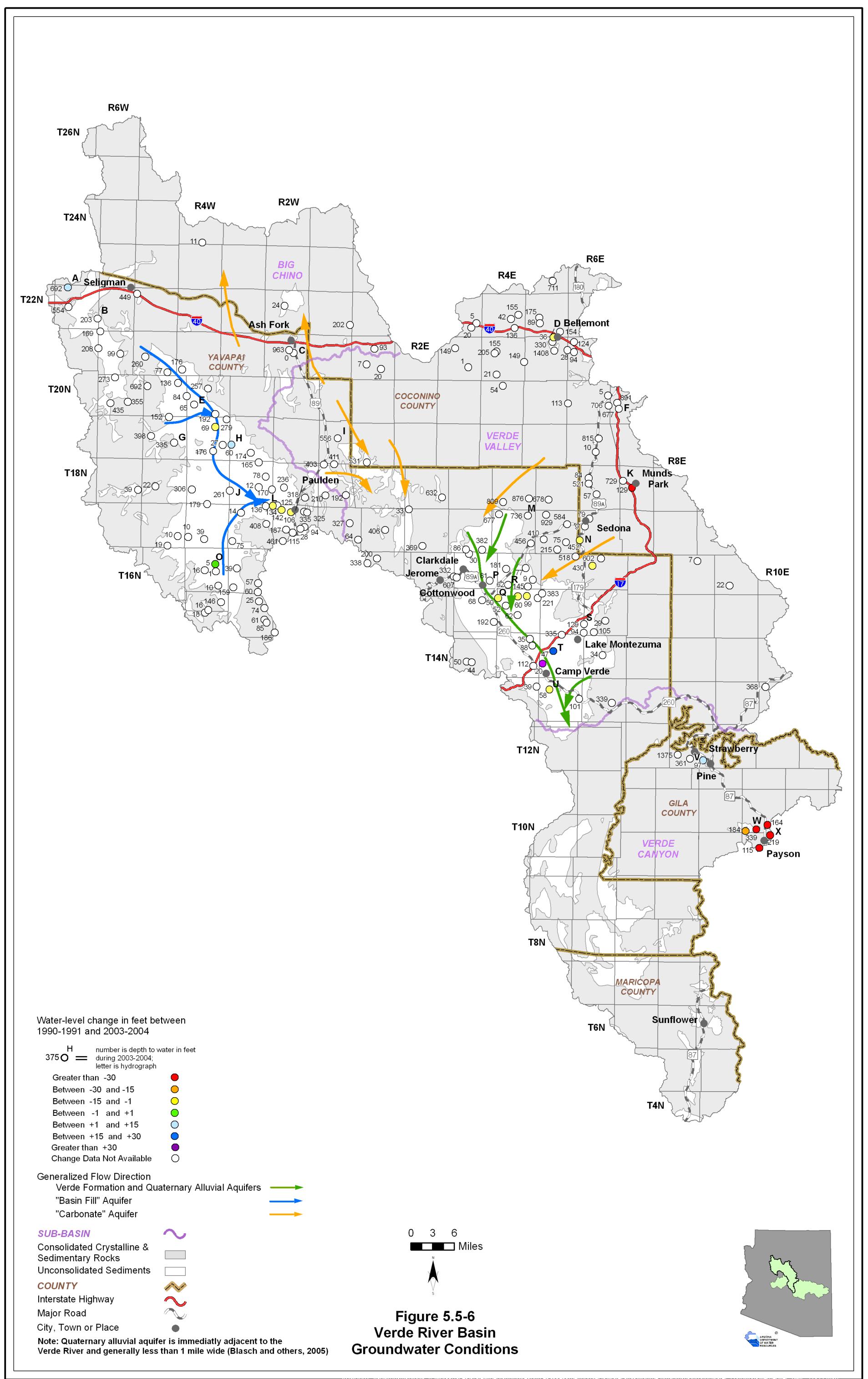
<sup>1</sup> Includes 19,300 AF of incidental and artificial recharge.

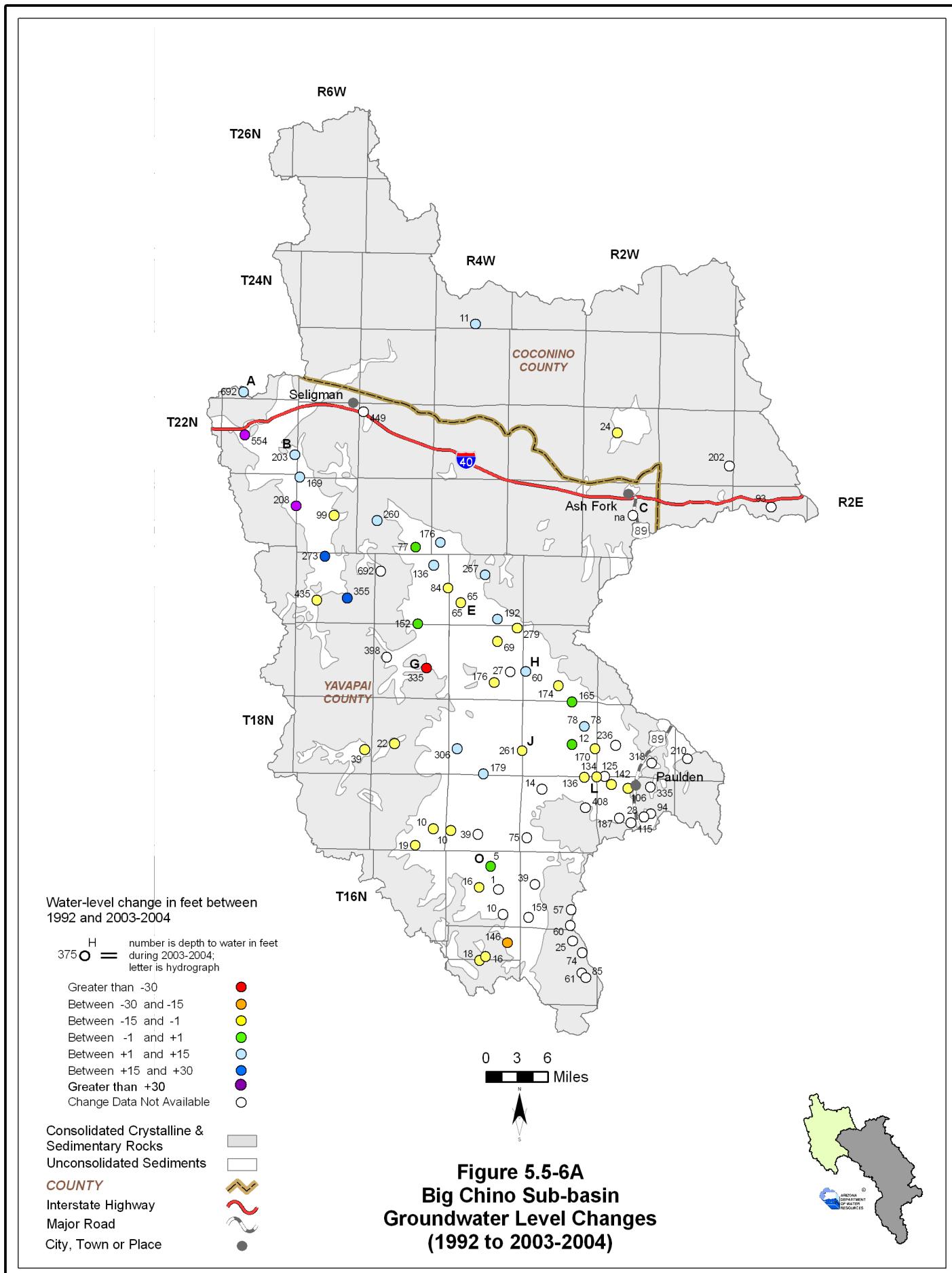
<sup>2</sup> Includes 4,300 AF of incidental and artificial recharge.

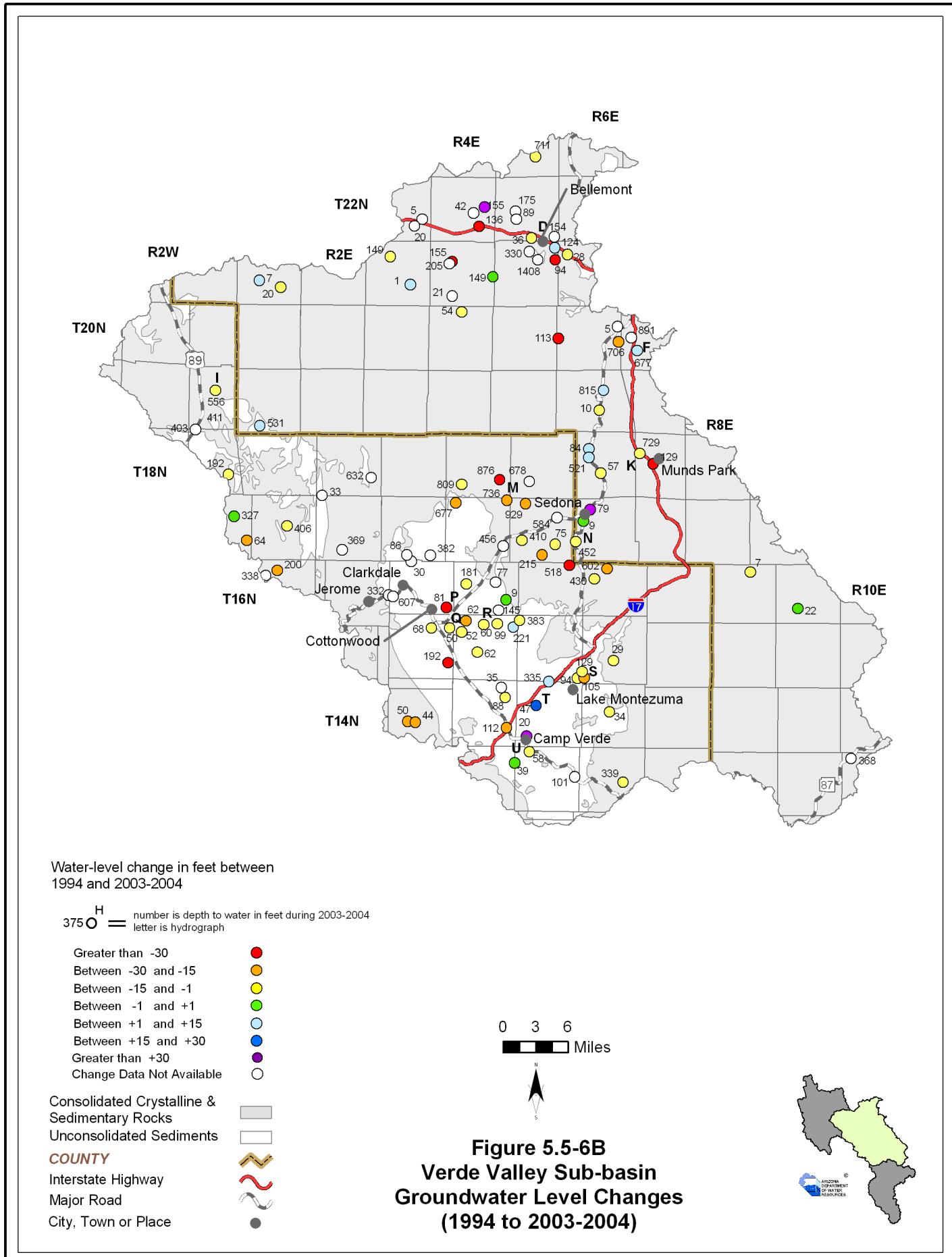
<sup>3</sup> Includes 8,010 AF of incidental recharge.

<sup>4</sup>This figure has been refuted as an overestimation by Morrison Maierle (2003).

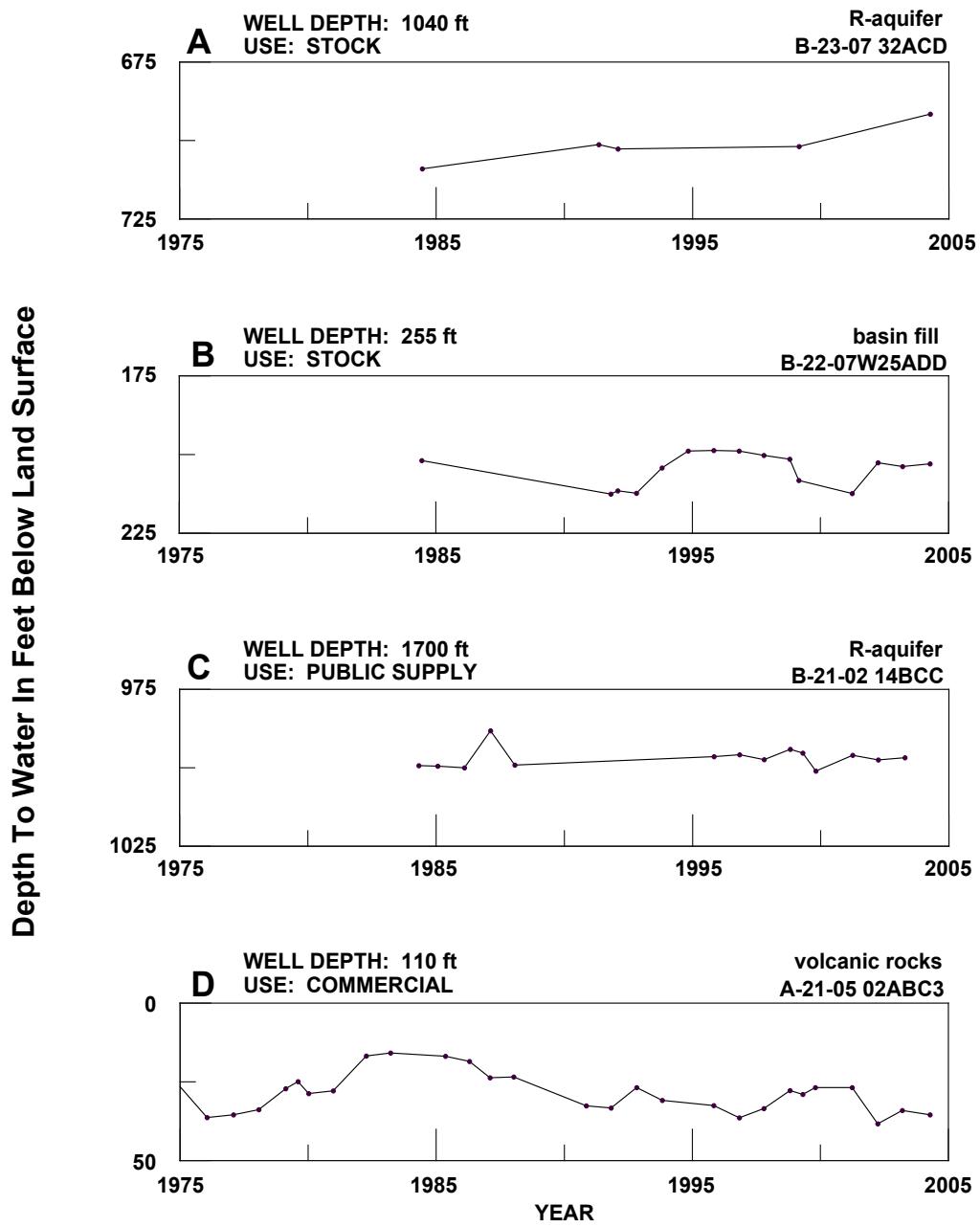




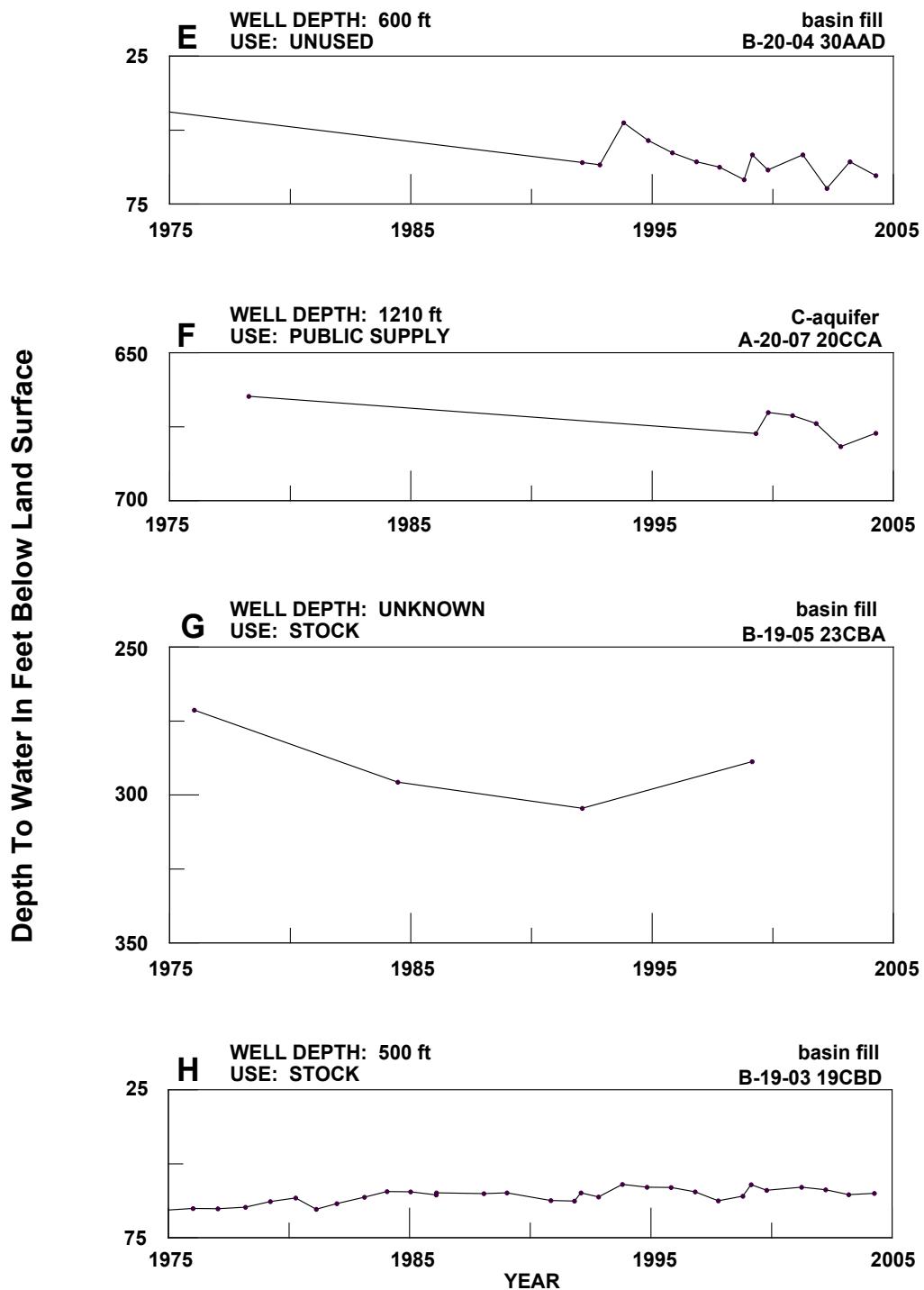




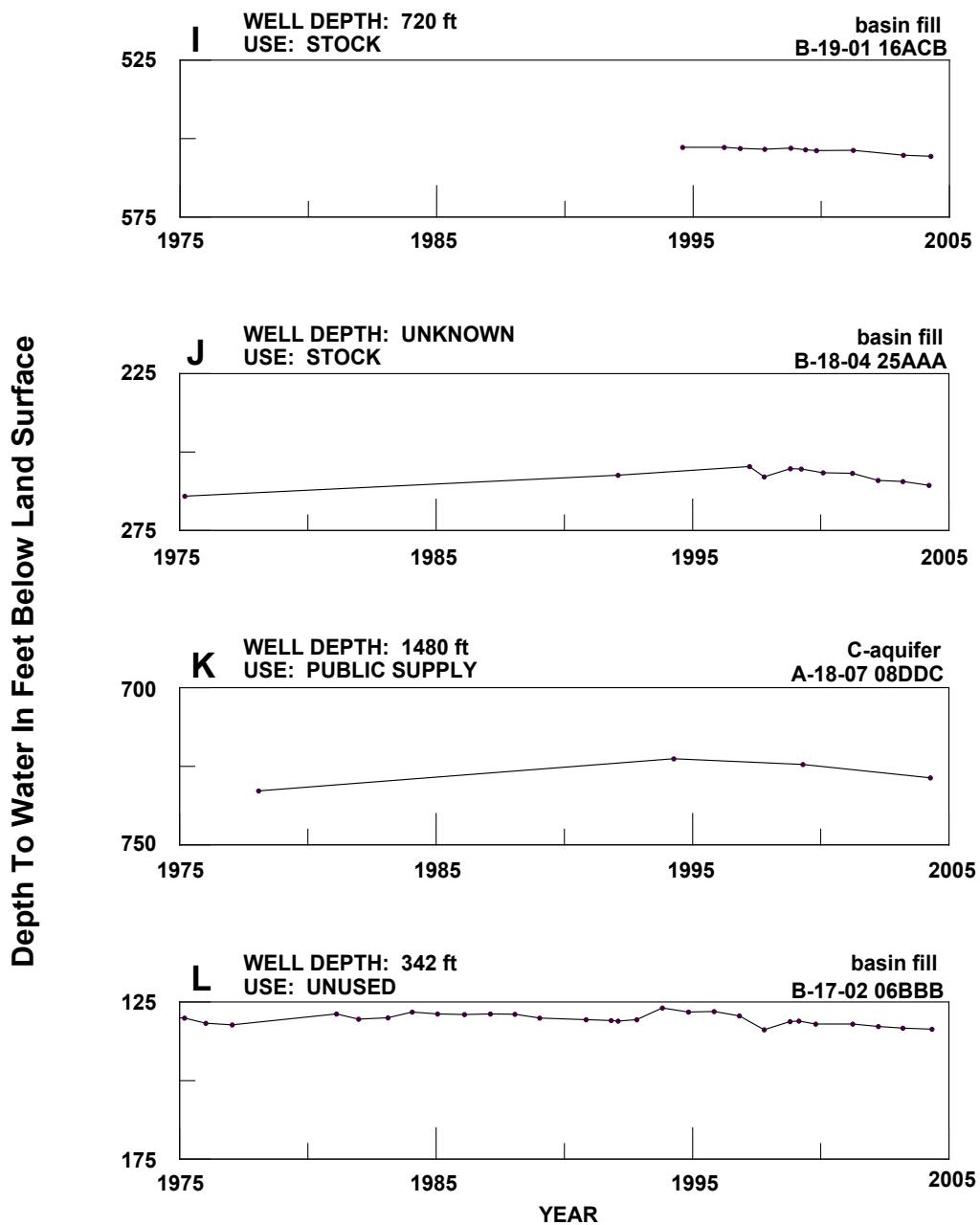
**Figure 5.5-7**  
**Verde River Basin**  
**Hydrographs Showing Depth to Water in Selected Wells**



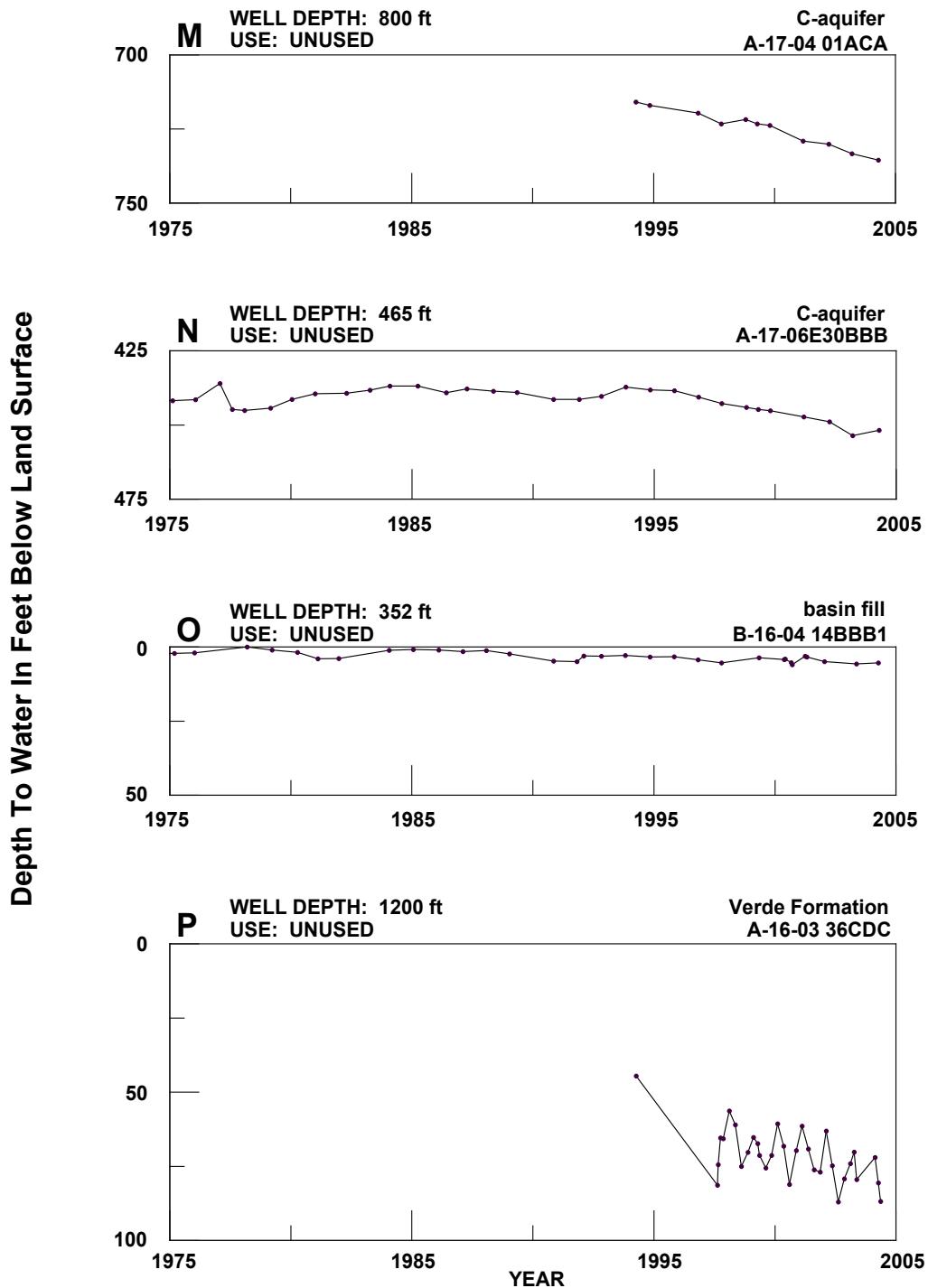
**Figure 5.5-7 (Con't.)**  
**Verde River Basin**  
**Hydrographs Showing Depth to Water in Selected Wells**



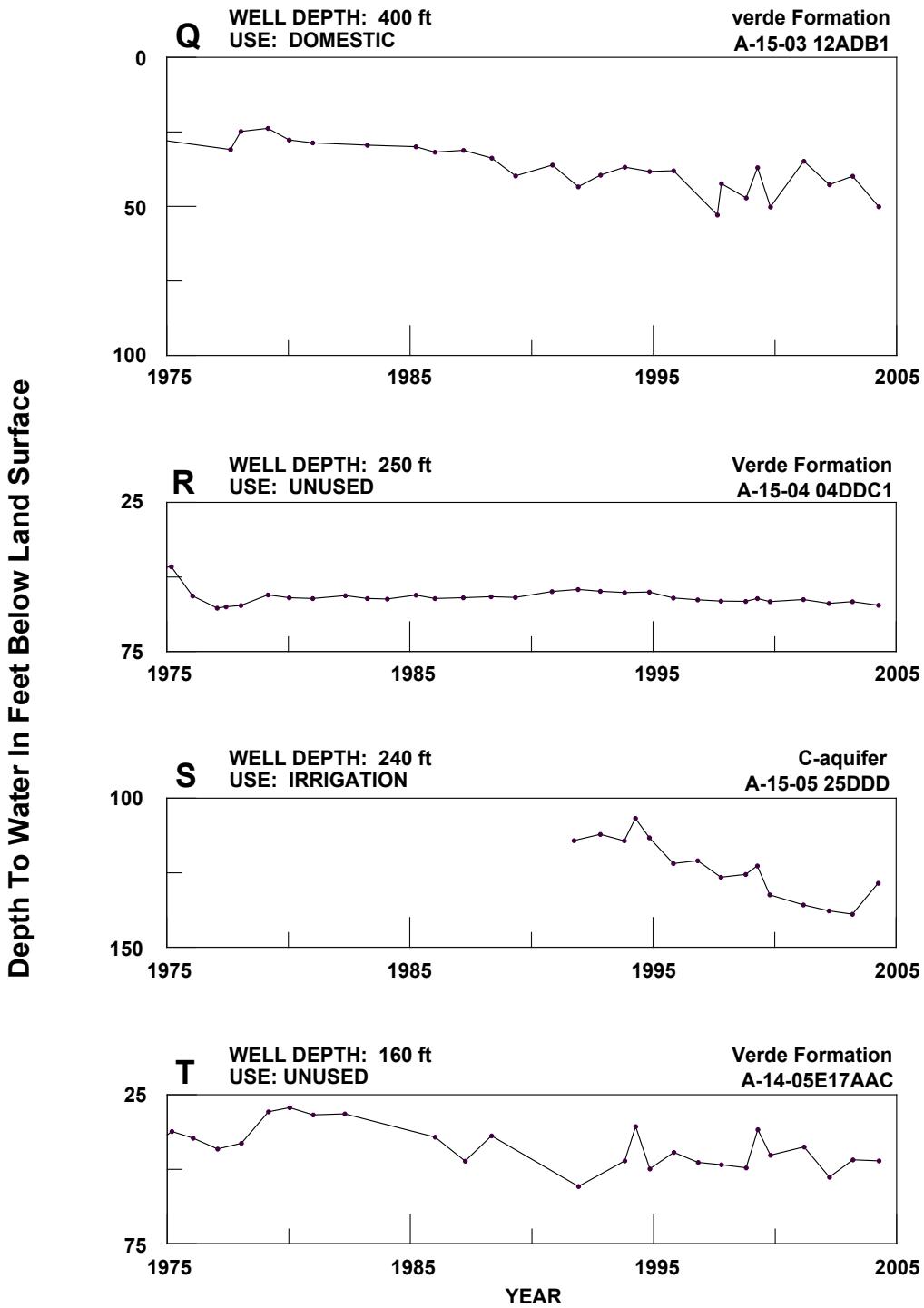
**Figure 5.5-7 (Con't.)**  
**Verde River Basin**  
**Hydrographs Showing Depth to Water in Selected Wells**



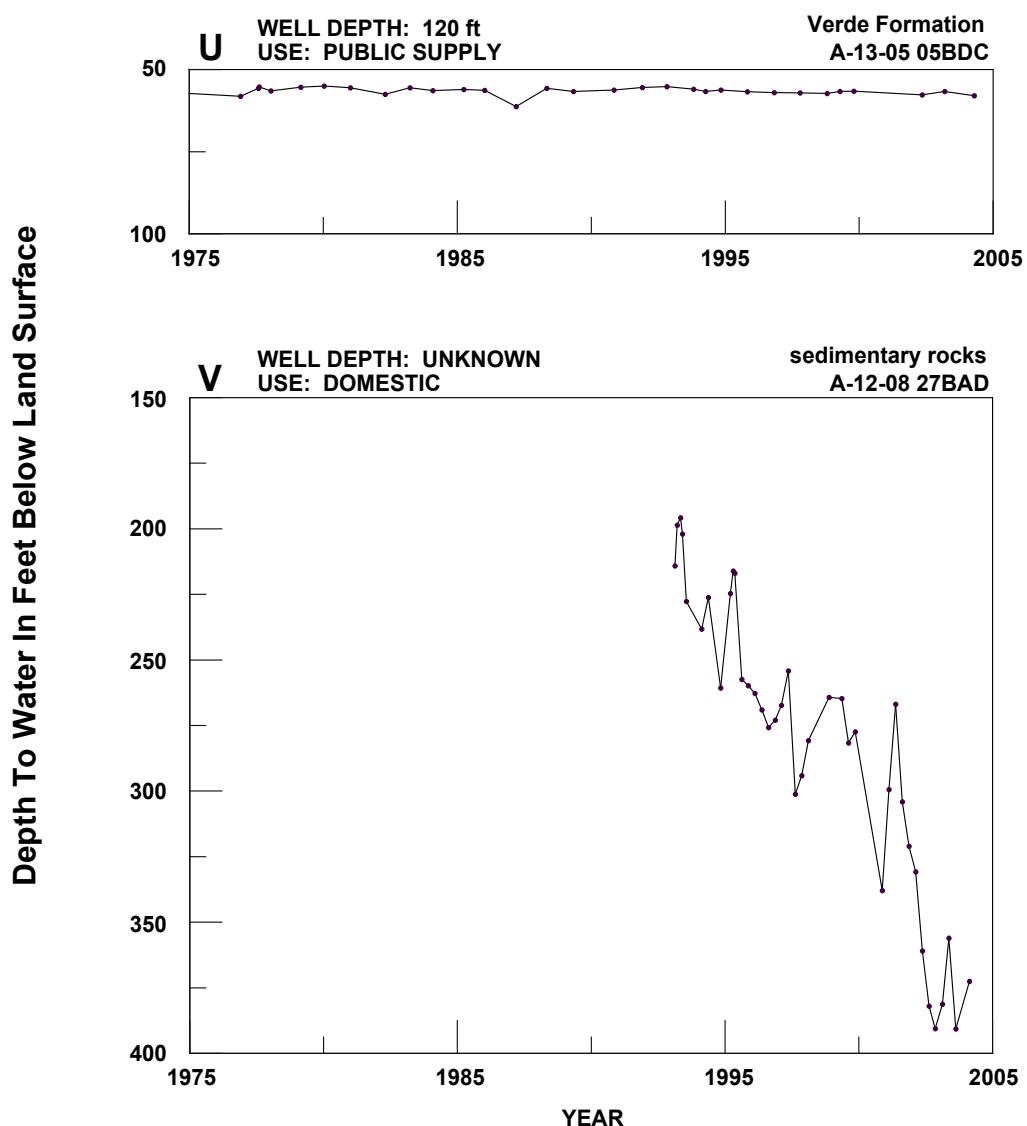
**Figure 5.5-7 (Con't.)**  
**Verde River Basin**  
**Hydrographs Showing Depth to Water in Selected Wells**



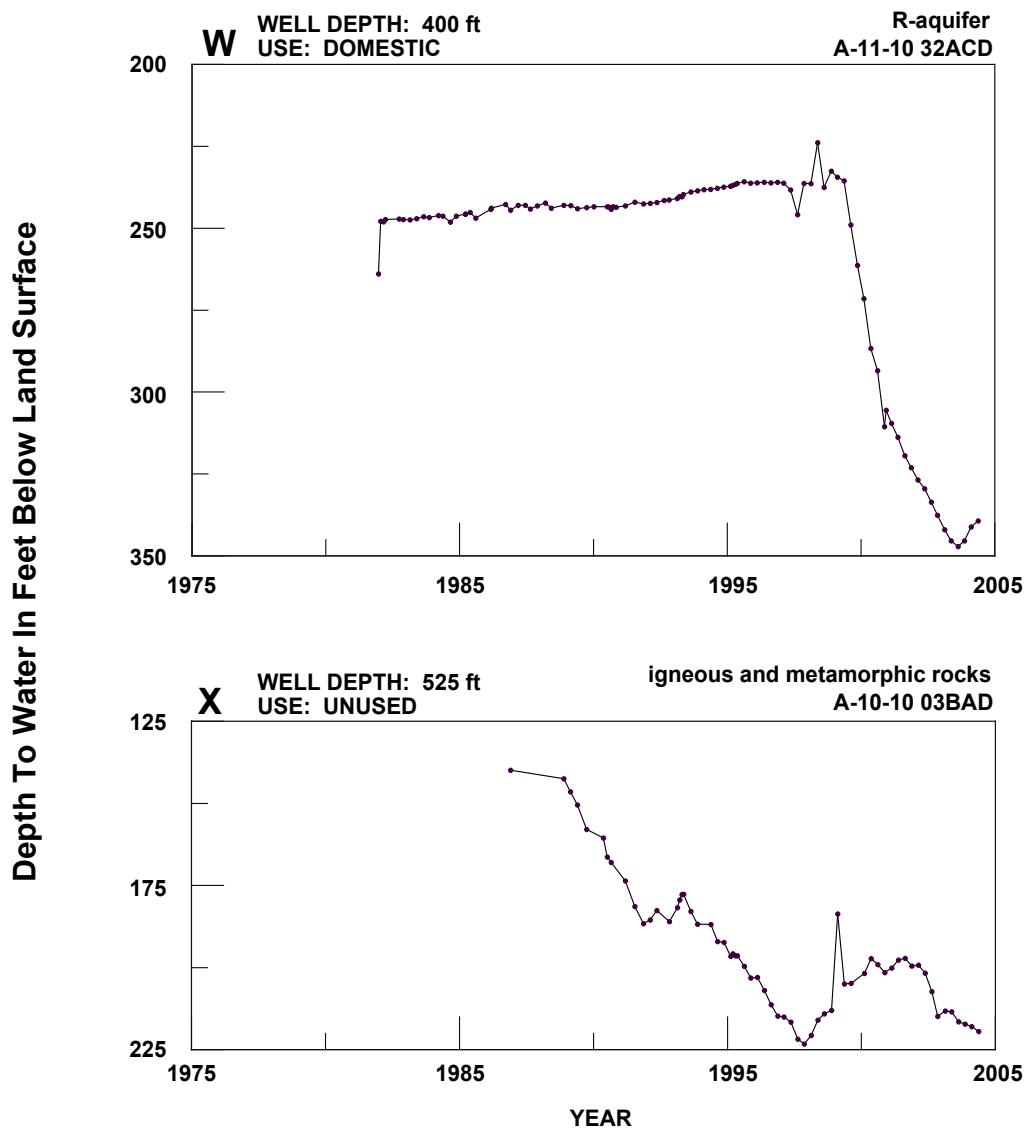
**Figure 5.5-7 (Con't.)**  
**Verde River Basin**  
**Hydrographs Showing Depth to Water in Selected Wells**



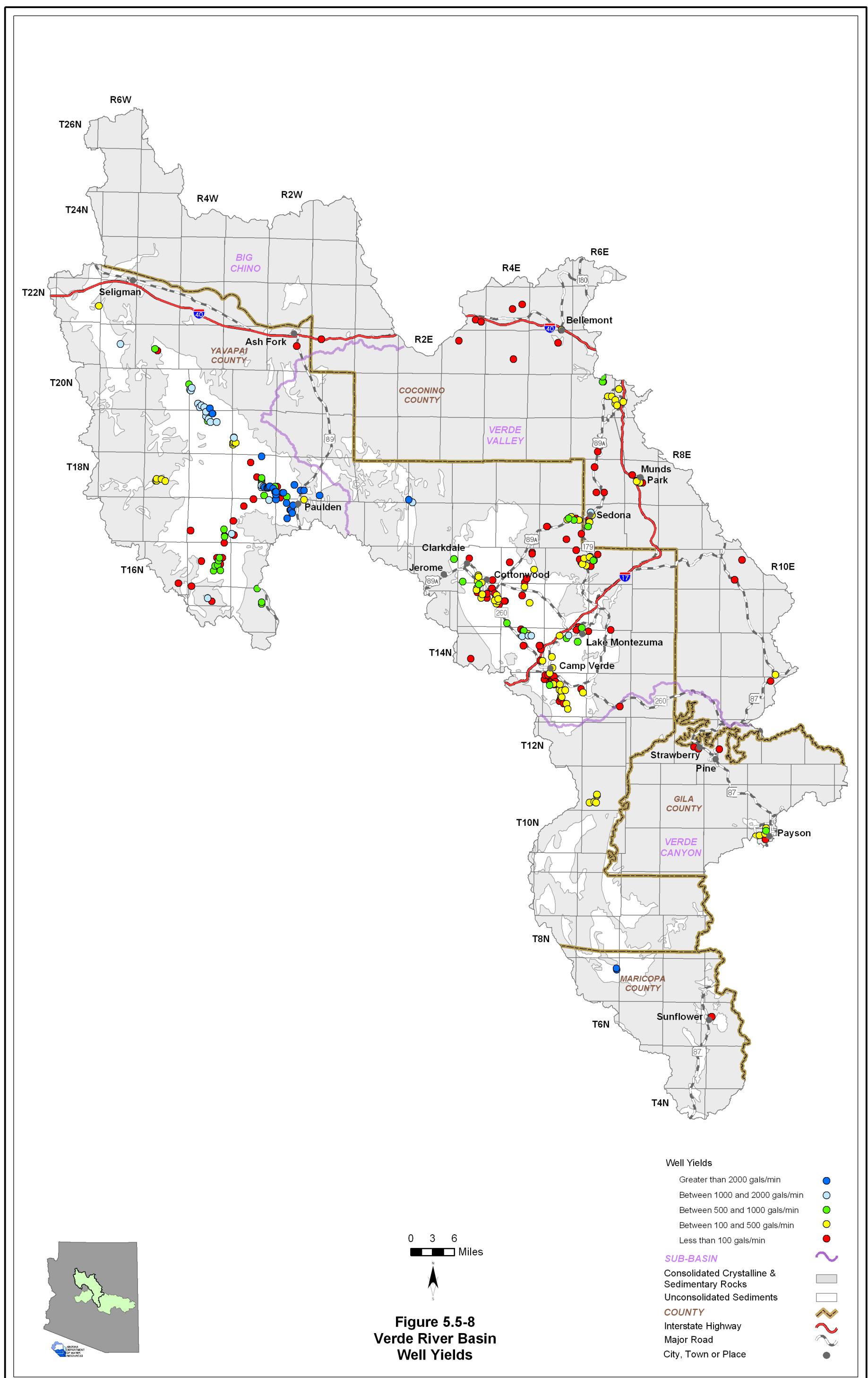
**Figure 5.5-7 (Con't.)**  
**Verde River Basin**  
**Hydrographs Showing Depth to Water in Selected Wells**



**Figure 5.5-7 (Con't.)**  
**Verde River Basin**  
**Hydrographs Showing Depth to Water in Selected Wells**







### 5.5.7 Water Quality of the Verde River Basin

Wells, springs and mine sites with parameter concentrations that have equaled or exceeded drinking water standard(s), including location and parameter(s) are shown in Table 5.5-7A. Impaired lakes and streams with site type, name, length of impaired reach, area of impaired lake, designated use standard and parameter(s) exceeded is shown in Table 5.5-7B. Figure 5.5-9 and 5.5-0A show the location of water quality occurrences keyed to Table 5.5-7. A description of water quality data sources and methods is found in Volume 1, Section 1.3.18. Not all parameters were measured at all sites; selective sampling for particular constituents is common.

#### Wells, Springs and Mines

- Refer to Table 5.5-7A.
- Four hundred and thirty sites have parameter concentrations that have equaled or exceeded drinking water standards
- The parameter most frequently equalled or exceeded in the sites measured was arsenic.
- Many of the wells in the Payson area equalled or exceed the standards for arsenic, beryllium, cadmium, lead, volatile organic compounds and selenium.
- Other parameters equalled or exceeded in this basin include fluoride, nitrates and total dissolved solids.

#### Lakes and Streams

- Refer to Table 5.5-7B.
- Water quality standards were exceeded in three lakes in the basin and five stream reaches on three streams.
- Three stream reaches, totaling 37.5 miles, on the Verde River exceeded the water quality standard for turbidity.
- Whitehorse Lake and Pecks Lake exceeded in dissolved oxygen and Stoneman Lake exceeded in arsenic and pH.
- Pecks Lake and Stoneman Lake are part of the ADEQ water quality improvement effort called the Total Maximum Daily Load (TMDL) program. Final TMDL reports have been completed for the lakes.
- Impaired reaches on the East Verde River, Oak Creek and Verde River and Whitehorse Lake are not part of the TMDL program at this time.

**Table 5.5-7 Water Quality Exceedences in the Verde River Basin<sup>1</sup>**

**A. Wells, Springs and Mines**

Map Key	Map Location <sup>2</sup>	Site Type	Site Location			Parameter(s) Concentration has Equalled or Exceeded Drinking Water Standard (DWS) <sup>2</sup>
			Township	Range	Section	
1	M	Well	21 North	4 East	5	NO3
2	M	Well	19 North	1 East	33	As
3	M	Well	18 North	1 East	36	As
4	M	Spring	18 North	3 East	8	Cd
5	M	Spring	17 North	1 East	7	As
6	M	Spring	17 North	3 East	5	As
7	M	Well	17 North	3 East	33	As
8	M	Well	17 North	4 East	15	NO3
9	M	Well	17 North	4 East	15	NO3
10	M	Well	17 North	5 East	11	As, Pb
11	M	Well	17 North	5 East	11	Cd
12	M	Well	17 North	5 East	12	As
13	M	Well	17 North	5 East	13	As
14	M	Well	17 North	5 East	15	As, Cd
15	M	Well	17 North	5 East	19	As
16	M	Well	17 North	5 East	25	As, Cd, Pb
17	M	Well	17 North	5 East	26	Pb
18	M	Well	17 North	5 East	26	Pb
19	M	Well	17 North	5 East	29	As
20	M	Well	17 North	5 East	35	As
21	M	Well	17 North	6 East	8	Cu
22	M	Well	17 North	6 East	19	As
23	A	Well	16 North	2 East	24	As
24	M	Spring	16 North	2 East	34	As
25	A	Well	16 North	3 East	21	As
26	A	Spring	16 North	3 East	22	As
27	A	Well	16 North	3 East	22	As
28	A	Well	16 North	3 East	27	As
29	A	Well	16 North	3 East	28	As
30	A	Well	16 North	3 East	28	As
31	A	Well	16 North	3 East	29	As
32	A	Well	16 North	3 East	30	As
33	A	Well	16 North	3 East	33	As
34	A	Well	16 North	3 East	33	As
35	A	Well	16 North	3 East	33	As, Be
36	A	Well	16 North	3 East	33	As
37	A	Well	16 North	3 East	34	As
38	A	Well	16 North	3 East	34	As
39	A	Well	16 North	3 East	34	As
40	A	Well	16 North	3 East	34	As, Cd
41	A	Well	16 North	3 East	34	As
42	A	Well	16 North	3 East	35	As
43	A	Well	16 North	4 East	11	As
44	A	Spring	16 North	4 East	23	As
45	A	Well	16 North	4 East	27	As
46	A	Well	16 North	4 East	27	As
47	A	Well	16 North	4 East	34	As
48	A	Well	16 North	4 East	35	As
49	A	Well	16 North	5 East	11	As
50	A	Well	16 North	5 East	13	As
51	A	Well	16 North	5 East	14	As
52	M	Well	16 North	6 East	8	As
53	M	Well	16 North	6 East	9	As
54	M	Well	16 North	6 East	13	As
55	M	Well	16 North	6 East	17	As
56	M	Well	16 North	6 East	18	As
57	M	Well	16 North	6 East	18	As
58	M	Well	16 North	6 East	18	As
59	M	Spring	15 North	2.5 East	13	As

**Table 5.5-7 Water Quality Exceedences in the Verde River Basin (cont'd)<sup>1</sup>**  
**A. Wells, Springs and Mines**

Map Key	Map Location <sup>2</sup>	Site Type	Site Location			Parameter(s) Concentration has Equalled or Exceeded Drinking Water Standard (DWS) <sup>2</sup>
			Township	Range	Section	
60	A	Well	15 North	3 East	4	As
61	A	Well	15 North	3 East	4	As
62	A	Well	15 North	3 East	5	As
63	A	Well	15 North	3 East	5	As
64	A	Well	15 North	3 East	11	As
65	A	Well	15 North	3 East	11	As
66	A	Well	15 North	3 East	12	As
67	A	Well	15 North	3 East	12	As
68	A	Well	15 North	3 East	12	As
69	A	Well	15 North	3 East	12	As
70	A	Well	15 North	3 East	12	As
71	A	Well	15 North	3 East	12	As
72	A	Well	15 North	3 East	13	As
73	A	Well	15 North	3 East	13	As
74	A	Well	15 North	3 East	13	As
75	A	Well	15 North	3 East	13	As
76	A	Well	15 North	3 East	13	As
77	A	Well	15 North	3 East	13	As
78	A	Well	15 North	3 East	13	As
79	A	Well	15 North	4 East	2	As
80	A	Well	15 North	4 East	2	As
81	A	Well	15 North	4 East	3	As
82	A	Well	15 North	4 East	3	As
83	A	Well	15 North	4 East	3	As
84	A	Well	15 North	4 East	3	As
85	A	Well	15 North	4 East	3	As
86	A	Well	15 North	4 East	3	As
87	A	Well	15 North	4 East	3	Pb
88	A	Well	15 North	4 East	4	As
89	A	Well	15 North	4 East	4	As
90	A	Well	15 North	4 East	6	As
91	A	Well	15 North	4 East	9	As
92	A	Well	15 North	4 East	10	As
93	A	Well	15 North	4 East	15	As
94	A	Well	15 North	4 East	15	Pb
95	A	Well	15 North	4 East	18	As
96	A	Well	15 North	4 East	18	As
97	A	Well	15 North	4 East	18	As
98	A	Well	15 North	4 East	18	As
99	A	Well	15 North	4 East	19	As
100	A	Well	15 North	4 East	19	As
101	A	Well	15 North	4 East	21	As, Pb
102	A	Well	15 North	4 East	22	As
103	A	Well	15 North	4 East	31	As
104	A	Well	15 North	4 East	33	As
105	A	Well	15 North	5 East	20	As
106	A	Well	15 North	5 East	24	Pb
107	A	Well	15 North	5 East	34	As
108	A	Well	15 North	5 East	35	As
109	A	Well	15 North	5 East	36	As
110	A	Well	15 North	5 East	36	As
111	A	Well	15 North	5 East	36	As
112	A	Well	15 North	5 East	36	As
113	A	Well	15 North	5 East	36	As
114	A	Well	15 North	5 East	36	As
115	A	Well	15 North	5 East	36	As
116	A	Well	15 North	5 East	36	As
117	A	Well	15 North	5 East	36	As, Pb
118	M	Well	15 North	6 East	29	As
119	M	Spring	15 North	6 East	31	As, Pb
120	M	Well	15 North	6 East	31	As

**Table 5.5-7 Water Quality Exceedences in the Verde River Basin (cont'd)<sup>1</sup>**

**A. Wells, Springs and Mines**

Map Key	Map Location <sup>2</sup>	Site Type	Site Location			Parameter(s) Concentration has Equalled or Exceeded Drinking Water Standard (DWS) <sup>2</sup>
			Township	Range	Section	
121	A	Spring	14 North	3 East	5	As
122	A	Spring	14 North	3 East	14	As
123	A	Well	14 North	3 East	21	NO3
124	A	Well	14 North	4 East	2	As
125	A	Well	14 North	4 East	3	As
126	A	Well	14 North	4 East	3	As
127	A	Well	14 North	4 East	3	As
128	A	Well	14 North	4 East	3	As, Se
129	A	Well	14 North	4 East	3	As
130	A	Well	14 North	4 East	11	As, Pb
131	A	Well	14 North	4 East	11	As
132	A	Well	14 North	4 East	11	As
133	A	Well	14 North	4 East	12	As
134	A	Well	14 North	4 East	13	As
135	A	Well	14 North	4 East	13	As
136	A	Well	14 North	4 East	13	As
137	A	Well	14 North	4 East	13	As
138	A	Well	14 North	4 East	13	As
139	A	Well	14 North	4 East	13	As
140	A	Well	14 North	4 East	13	As
141	A	Well	14 North	4 East	13	As
142	A	Well	14 North	4 East	13	As
143	A	Well	14 North	4 East	13	As
144	A	Well	14 North	4 East	14	As, TDS
145	A	Well	14 North	4 East	14	As
146	A	Well	14 North	4 East	14	As
147	A	Well	14 North	4 East	14	As
148	A	Well	14 North	4 East	24	As
149	A	Well	14 North	4 East	24	As, Cd
150	A	Well	14 North	5 East	1	As
151	A	Well	14 North	5 East	1	As
152	A	Well	14 North	5 East	1	As
153	A	Well	14 North	5 East	1	As
154	A	Well	14 North	5 East	1	As
155	A	Well	14 North	5 East	2	As
156	A	Well	14 North	5 East	2	As
157	A	Well	14 North	5 East	2	As
158	A	Well	14 North	5 East	2	As
159	A	Well	14 North	5 East	2	As
160	A	Well	14 North	5 East	2	As
161	A	Well	14 North	5 East	2	As
162	A	Well	14 North	5 East	2	As
163	A	Well	14 North	5 East	2	As
164	A	Well	14 North	5 East	4	As
165	A	Well	14 North	5 East	4	As
166	A	Well	14 North	5 East	17	As, Pb
167	A	Well	14 North	5 East	18	As
168	A	Well	14 North	5 East	18	As
169	A	Well	14 North	5 East	19	As
170	A	Well	14 North	5 East	19	As
171	A	Well	14 North	5 East	19	As, Se
172	A	Well	14 North	5 East	19	As
173	A	Well	14 North	5 East	19	As
174	A	Well	14 North	5 East	19	As
175	A	Well	14 North	5 East	19	As
176	A	Well	14 North	5 East	19	As
177	A	Well	14 North	5 East	31	As
178	A	Well	14 North	5 East	31	As
179	A	Well	14 North	5 East	31	As
180	A	Well	14 North	5 East	32	As
181	A	Well	14 North	5 East	32	As

**Table 5.5-7 Water Quality Exceedences in the Verde River Basin (cont'd)<sup>1</sup>**

**A. Wells, Springs and Mines**

Map Key	Map Location <sup>2</sup>	Site Type	Site Location			Parameter(s) Concentration has Equalled or Exceeded Drinking Water Standard (DWS) <sup>2</sup>
			Township	Range	Section	
182	A	Well	14 North	5 East	32	As, Pb
183	A	Well	14 North	5 East	32	As
184	A	Well	14 North	5 East	32	As
185	A	Well	14 North	5 East	32	As
186	A	Well	14 North	5 East	32	As
187	A	Well	13 North	4 East	12	As
188	A	Well	13 North	5 East	4	As, NO <sub>3</sub>
189	A	Well	13 North	5 East	5	As
190	A	Well	13 North	5 East	5	As
191	A	Well	13 North	5 East	5	As
192	A	Well	13 North	5 East	5	As
193	A	Well	13 North	5 East	5	As
194	A	Well	13 North	5 East	5	As
195	A	Well	13 North	5 East	5	As
196	A	Well	13 North	5 East	5	As
197	A	Well	13 North	5 East	6	As
198	A	Well	13 North	5 East	6	As
199	A	Well	13 North	5 East	6	As, Pb
200	A	Well	13 North	5 East	6	As
201	A	Well	13 North	5 East	6	As
202	A	Well	13 North	5 East	6	As
203	A	Well	13 North	5 East	6	As
204	A	Well	13 North	5 East	6	As
205	A	Well	13 North	5 East	6	As
206	A	Well	13 North	5 East	6	As
207	A	Well	13 North	5 East	6	As
208	A	Well	13 North	5 East	6	As
209	A	Well	13 North	5 East	6	As
210	A	Well	13 North	5 East	6	As
211	A	Well	13 North	5 East	6	As
212	A	Well	13 North	5 East	6	As
213	A	Well	13 North	5 East	6	As
214	A	Well	13 North	5 East	6	As, TDS
215	A	Well	13 North	5 East	6	As
216	A	Well	13 North	5 East	6	As
217	A	Well	13 North	5 East	6	As
218	A	Well	13 North	5 East	6	As
219	A	Well	13 North	5 East	6	As
220	A	Well	13 North	5 East	7	As
221	A	Well	13 North	5 East	7	As
222	A	Well	13 North	5 East	7	As
223	A	Well	13 North	5 East	7	As, Pb
224	A	Well	13 North	5 East	7	As
225	A	Well	13 North	5 East	7	As
226	A	Well	13 North	5 East	7	As
227	A	Well	13 North	5 East	7	As
228	A	Well	13 North	5 East	7	As
229	A	Well	13 North	5 East	7	As, Pb
230	A	Well	13 North	5 East	7	As, TDS
231	A	Well	13 North	5 East	7	As
232	A	Well	13 North	5 East	7	As
233	A	Well	13 North	5 East	7	As
234	A	Well	13 North	5 East	7	As
235	A	Well	13 North	5 East	7	As
236	A	Well	13 North	5 East	7	As
237	A	Well	13 North	5 East	7	As
238	A	Well	13 North	5 East	7	As
239	A	Well	13 North	5 East	7	As
240	A	Well	13 North	5 East	7	As
241	A	Well	13 North	5 East	7	As
242	A	Well	13 North	5 East	7	As

**Table 5.5-7 Water Quality Exceedences in the Verde River Basin (cont'd)<sup>1</sup>**

**A. Wells, Springs and Mines**

Map Key	Map Location <sup>2</sup>	Site Type	Site Location			Parameter(s) Concentration has Equalled or Exceeded Drinking Water Standard (DWS) <sup>2</sup>
			Township	Range	Section	
243	A	Well	13 North	5 East	7	As
244	A	Well	13 North	5 East	7	As
245	A	Well	13 North	5 East	7	As
246	A	Well	13 North	5 East	7	As
247	A	Well	13 North	5 East	7	As
248	A	Well	13 North	5 East	7	As
249	A	Well	13 North	5 East	7	As
250	A	Well	13 North	5 East	7	F
251	A	Well	13 North	5 East	8	As
252	A	Well	13 North	5 East	8	As
253	A	Well	13 North	5 East	8	As
254	A	Well	13 North	5 East	8	As
255	A	Well	13 North	5 East	8	As
256	A	Well	13 North	5 East	8	As
257	A	Well	13 North	5 East	8	As
258	A	Well	13 North	5 East	8	As
259	A	Well	13 North	5 East	8	As
260	A	Well	13 North	5 East	8	As
261	A	Well	13 North	5 East	8	As
262	A	Well	13 North	5 East	8	As
263	A	Well	13 North	5 East	8	As
264	A	Well	13 North	5 East	8	As
265	A	Well	13 North	5 East	8	As
266	A	Well	13 North	5 East	8	As
267	A	Well	13 North	5 East	8	As
268	A	Well	13 North	5 East	8	As, Pb
269	A	Well	13 North	5 East	9	As
270	A	Well	13 North	5 East	9	As
271	A	Well	13 North	5 East	9	As, Pb
272	A	Well	13 North	5 East	9	As
273	A	Well	13 North	5 East	12	As
274	A	Well	13 North	5 East	13	As
275	A	Well	13 North	5 East	15	As
276	A	Well	13 North	5 East	15	As
277	A	Well	13 North	5 East	15	TDS
278	A	Well	13 North	5 East	16	As
279	A	Spring	13 North	5 East	16	As, Pb
280	A	Well	13 North	5 East	16	As
281	A	Well	13 North	5 East	16	As
282	A	Well	13 North	5 East	16	As
283	A	Well	13 North	5 East	17	As
284	A	Well	13 North	5 East	17	As
285	A	Well	13 North	5 East	17	As
286	A	Well	13 North	5 East	17	As
287	A	Well	13 North	5 East	17	As
288	A	Well	13 North	5 East	17	As
289	A	Well	13 North	5 East	17	As
290	A	Well	13 North	5 East	20	As
291	A	Well	13 North	5 East	21	TDS
292	A	Well	13 North	5 East	21	As
293	A	Well	13 North	5 East	21	As
294	A	Well	13 North	5 East	21	As
295	A	Well	13 North	5 East	27	As
296	A	Well	13 North	5 East	27	As
297	A	Well	13 North	5 East	27	As
298	A	Well	13 North	5 East	27	As
299	A	Well	13 North	5 East	28	As
300	A	Well	13 North	5 East	28	As
301	A	Well	13 North	5 East	28	As
302	A	Well	13 North	5 East	28	As, Pb
303	A	Well	13 North	5 East	28	TDS

**Table 5.5-7 Water Quality Exceedences in the Verde River Basin (cont'd)<sup>1</sup>**

**A. Wells, Springs and Mines**

Map Key	Map Location <sup>2</sup>	Site Type	Site Location			Parameter(s) Concentration has Equalled or Exceeded Drinking Water Standard (DWS) <sup>2</sup>
			Township	Range	Section	
304	A	Well	13 North	5 East	28	As
305	A	Well	13 North	5 East	28	As
306	A	Well	13 North	5 East	28	As
307	A	Well	13 North	5 East	28	As
308	A	Well	13 North	5 East	28	As
309	A	Well	13 North	5 East	34	As
310	A	Well	13 North	5 East	34	As
311	A	Well	13 North	5 East	34	As
312	M	Well	13 North	6 East	29	As
313	M	Spring	12 North	6 East	11	As
314	M	Spring	12 North	6 East	11	As
315	M	Well	12 North	8 East	26	As
316	M	Well	12 North	8 East	26	As
317	M	Well	12 North	8 East	26	As
318	M	Well	12 North	8 East	26	As
319	M	Well	11.5 North	10 East	35	As
320	M	Spring	11 North	6 East	10	As, TDS
321	I	Well	10 North	10 East	3	As, Be, Cd, Pb, Organics, Se
322	I	Well	10 North	10 East	4	As, Be, Cd, Pb, Organics, Se
323	I	Well	10 North	10 East	4	As, Be, Cd, Pb, Organics, Se
324	I	Well	10 North	10 East	4	Organics
325	I	Well	10 North	10 East	4	Organics
326	I	Well	10 North	10 East	4	Organics
327	I	Well	10 North	10 East	4	Organics
328	I	Well	10 North	10 East	4	As, Be, Cd, Pb, Organics, Se
329	I	Well	10 North	10 East	4	NO3
330	I	Well	10 North	10 East	4	As, Be, Cd, Pb, Organics, Se
331	I	Well	10 North	10 East	4	As, Be, Cd, Pb, Organics, Se
332	I	Well	10 North	10 East	4	As
333	M	Well	10 North	10 East	8	As
334	M	Well	10 North	10 East	8	Pb
335	I	Well	10 North	10 East	9	As, Organics
336	I	Well	10 North	10 East	9	Pb
337	I	Well	10 North	10 East	9	As, NO3
338	I	Well	10 North	10 East	9	As
339	I	Well	10 North	10 East	9	As, Be, Cd, Pb, Se
340	I	Well	10 North	10 East	9	As, Be, Cd, Pb, Organics, Se
341	I	Well	10 North	10 East	9	As, Be, Cd, Pb, Organics, Se
342	I	Well	10 North	10 East	9	As, Be, Cd, Pb, Organics, Se
343	I	Well	10 North	10 East	9	As, Be, Cd, Pb, Organics, Se
344	I	Well	10 North	10 East	9	As, Be, Cd, Pb, Organics, Se
345	I	Well	10 North	10 East	9	As, Be, Cd, Pb, Organics, Se
346	I	Well	10 North	10 East	9	As, Be, Cd, Pb, Organics, Se
347	I	Well	10 North	10 East	9	As, Be, Cd, Pb, Organics, Se
348	I	Well	10 North	10 East	9	As, Be, Cd, Pb, Organics, NO3, Se
349	I	Well	10 North	10 East	9	As, Be, Cd, Pb, Organics, Se
350	I	Well	10 North	10 East	9	As, Be, Cd, Pb, Se
351	I	Well	10 North	10 East	9	As, Be, Cd, Pb, Organics, Se
352	I	Well	10 North	10 East	9	As, Be, Cd, Pb, Organics, Se
353	I	Well	10 North	10 East	9	As, Be, Cd, Pb, Organics, Se
354	I	Well	10 North	10 East	9	Organics
355	I	Well	10 North	10 East	9	Organics
356	I	Well	10 North	10 East	9	As, Be, Cd, Pb, Organics, Se
357	I	Well	10 North	10 East	9	As, Be, Cd, Pb, Organics, Se
358	I	Well	10 North	10 East	9	As, Be, Cd, Pb, Organics, Se
359	I	Well	10 North	10 East	9	As, Be, Cd, Pb, Organics, Se
360	I	Well	10 North	10 East	9	As, Be, Cd, Pb, Organics, Se
361	I	Well	10 North	10 East	9	As, Be, Cd, Pb, Organics, Se

**Table 5.5-7 Water Quality Exceedences in the Verde River Basin (cont'd)<sup>1</sup>**

**A. Wells, Springs and Mines**

Map Key	Map Location <sup>2</sup>	Site Type	Site Location			Parameter(s) Concentration has Equalled or Exceeded Drinking Water Standard (DWS) <sup>2</sup>
			Township	Range	Section	
362	I	Well	10 North	10 East	9	As, Be, Cd, Pb, Organics, Se
363	I	Well	10 North	10 East	9	As, Be, Cd, Pb, Organics, Se
364	I	Well	10 North	10 East	9	As, Be, Cd, Pb, Organics, Se
365	I	Well	10 North	10 East	9	As
366	I	Well	10 North	10 East	9	As, Be, Cd, Pb, Organics, Se
367	I	Well	10 North	10 East	9	As, Be, Cd, Pb, Organics, Se
368	I	Well	10 North	10 East	9	As, Be, Cd, Pb, Organics, Se
369	I	Well	10 North	10 East	9	As, Be, Cd, Pb, Organics, Se
370	I	Well	10 North	10 East	9	As, Be, Cd, Pb, Organics, Se
371	I	Well	10 North	10 East	9	As, Be, Cd, Pb, Organics, Se
372	I	Well	10 North	10 East	9	As, Be, Cd, Pb, Organics, Se
373	I	Well	10 North	10 East	9	As, Be, Cd, Pb, Organics, Se
374	I	Well	10 North	10 East	9	As, Be, Cd, Pb, Organics, Se
375	I	Well	10 North	10 East	9	As, Be, Cd, Pb, Organics, Se
376	I	Well	10 North	10 East	9	Organics
377	I	Well	10 North	10 East	9	Organics
378	I	Well	10 North	10 East	9	NO3
379	I	Well	10 North	10 East	9	As, Be, Cd, Pb, Organics, Se
380	I	Well	10 North	10 East	9	As, Be, Cd, Pb, Organics, Se
381	I	Well	10 North	10 East	9	As, Be, Cd, Pb, Organics, Se
382	I	Well	10 North	10 East	9	As, Be, Cd, Pb, Organics, Se
383	I	Well	10 North	10 East	9	As, Be, Cd, Pb, Organics, Se
384	I	Well	10 North	10 East	9	As, Be, Cd, Pb, Organics, Se
385	I	Well	10 North	10 East	9	As, Be, Cd, Pb, Organics, Se
386	I	Well	10 North	10 East	9	Organics
387	I	Well	10 North	10 East	9	As, Be, Cd, Pb, Organics, Se
388	I	Well	10 North	10 East	9	As, Be, Cd, Pb, Organics, Se
389	I	Well	10 North	10 East	9	As, Be, Cd, Pb, Organics, Se
390	I	Well	10 North	10 East	9	As, Be, Cd, Pb, Organics, Se
391	I	Well	10 North	10 East	9	Organics
392	I	Well	10 North	10 East	9	Organics
393	I	Well	10 North	10 East	9	Organics
394	I	Well	10 North	10 East	9	Organics
395	I	Well	10 North	10 East	9	Organics
396	I	Well	10 North	10 East	9	Organics
397	I	Well	10 North	10 East	9	As, Be, Cd, Pb, Organics, Se
398	I	Well	10 North	10 East	9	Organics
399	I	Well	10 North	10 East	9	As
400	I	Well	10 North	10 East	9	As, Be, Cd, Pb, Se
401	I	Well	10 North	10 East	9	Organics
402	I	Well	10 North	10 East	9	Organics
403	I	Well	10 North	10 East	9	Organics
404	I	Well	10 North	10 East	9	Organics
405	I	Well	10 North	10 East	10	As, Be, Cd, Pb, Organics, Se
406	I	Well	10 North	10 East	10	As, Be, Cd, Pb, Organics, Se
407	I	Well	10 North	10 East	10	As, Be, Cd, Pb, Organics, Se
408	I	Well	10 North	10 East	10	As
409	I	Well	10 North	10 East	10	As, NO3
410	I	Well	10 North	10 East	10	As, Be, Cd, Pb, Se
411	M	Well	6 North	7 East	28	F
412	M	Well	22 North	7 West	8	As
413	M	Well	22 North	7 West	25	NO3
414	M	Well	19 North	4 West	4	As
415	M	Well	19 North	4 West	10	As
416	M	Well	18 North	1 West	6	NO3
417	M	Well	18 North	1 West	6	NO3
418	M	Well	18 North	2 West	27	As
419	M	Well	18 North	2 West	27	As
420	M	Well	18 North	3 West	11	As
421	M	Well	18 North	3 West	25	As
422	M	Spring	18 North	6 West	27	As
423	M	Well	17 North	2 West	2	As

**Table 5.5-7 Water Quality Exceedences in the Verde River Basin (cont'd)<sup>1</sup>**

**A. Wells, Springs and Mines**

Map Key	Map Location <sup>2</sup>	Site Type	Site Location			Parameter(s) Concentration has Equalled or Exceeded Drinking Water Standard (DWS) <sup>2</sup>
			Township	Range	Section	
424	M	Well	17 North	2 West	3	As
425	M	Well	17 North	2 West	3	As
426	M	Well	17 North	2 West	4	As
427	M	Well	17 North	2 West	9	As
428	M	Well	17 North	2 West	15	As
429	M	Well	17 North	2 West	22	As
430	M	Spring	17 North	4 West	8	As

**B. Lakes and Streams**

Map Key	Map Location <sup>2</sup>	Site Type	Site Name	Length of Impaired Stream Reach (in miles)	Area of Impaired Lake (in acres)	Designated Use Standard <sup>4</sup>	Parameter(s) Exceeding Use Standard <sup>3</sup>
a	M	Stream	East Verde River - Ellison Creek to American Gulch	20	NA	A&W	Se
b	M	Stream	Oak Creek - Slide Rock State Park	1	NA	FBC	Escherichia coli
c	A	Lake	Pecks Lake	NA	95	A&W	DO, pH and nutrients
d	M	Lake	Stoneman Lake <sup>5</sup>	NA	14	A&W	DO, pH and nutrients
e	A	Stream	Verde River - Beaver Creek to HUC boundary	0.5	NA	A&W	Turbidity
f	A	Stream	Verde River - Oak Creek to Beaver Creek	13	NA	A&W	Turbidity
g	A	Stream	Verde River - West Clear Creek to Fossil Creek	24	NA	A&W	Turbidity
h	M	Lake	Whitehorse Lake	NA	41	A&W	DO

**Notes:**

<sup>1</sup> Water quality samples collected between 1975 and 2004.

<sup>2</sup>M = Figure 5.5-9; I = Inset; A = Figure 5.5-9A

<sup>3</sup>As = Arsenic

Be = Beryllium

Cd = Cadmium

DO = Dissolved oxygen

F= Fluoride

Pb = Lead

NO<sub>3</sub> = Nitrate/Nitrite

Organics = One or more of several volatile and semi-volatile organic compounds and pesticides

pH = Measurement of acidity or alkalinity

Se = Selenium

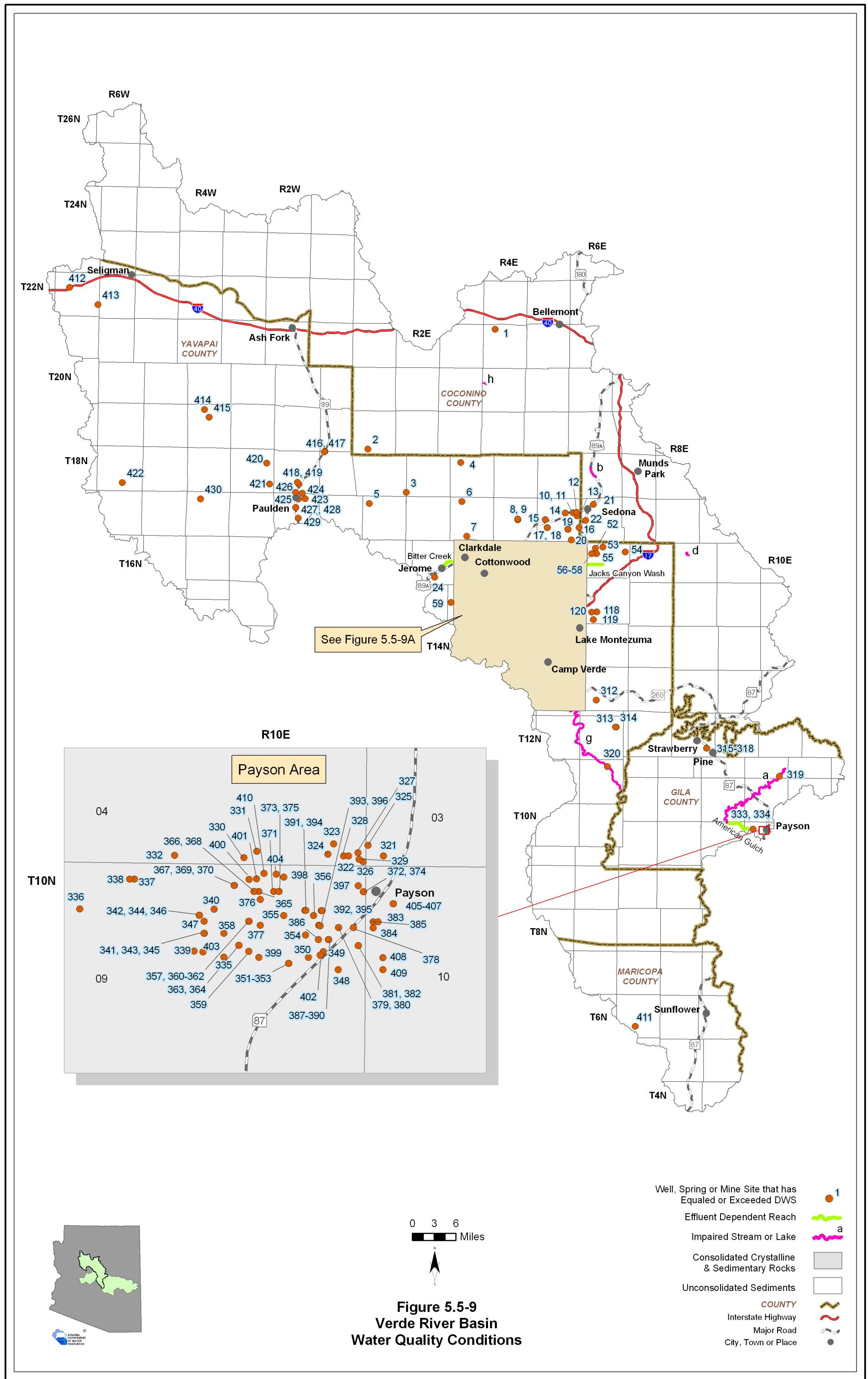
TDS = Total Dissolved Solids

<sup>4</sup>A&W = Aquatic and Wildlife

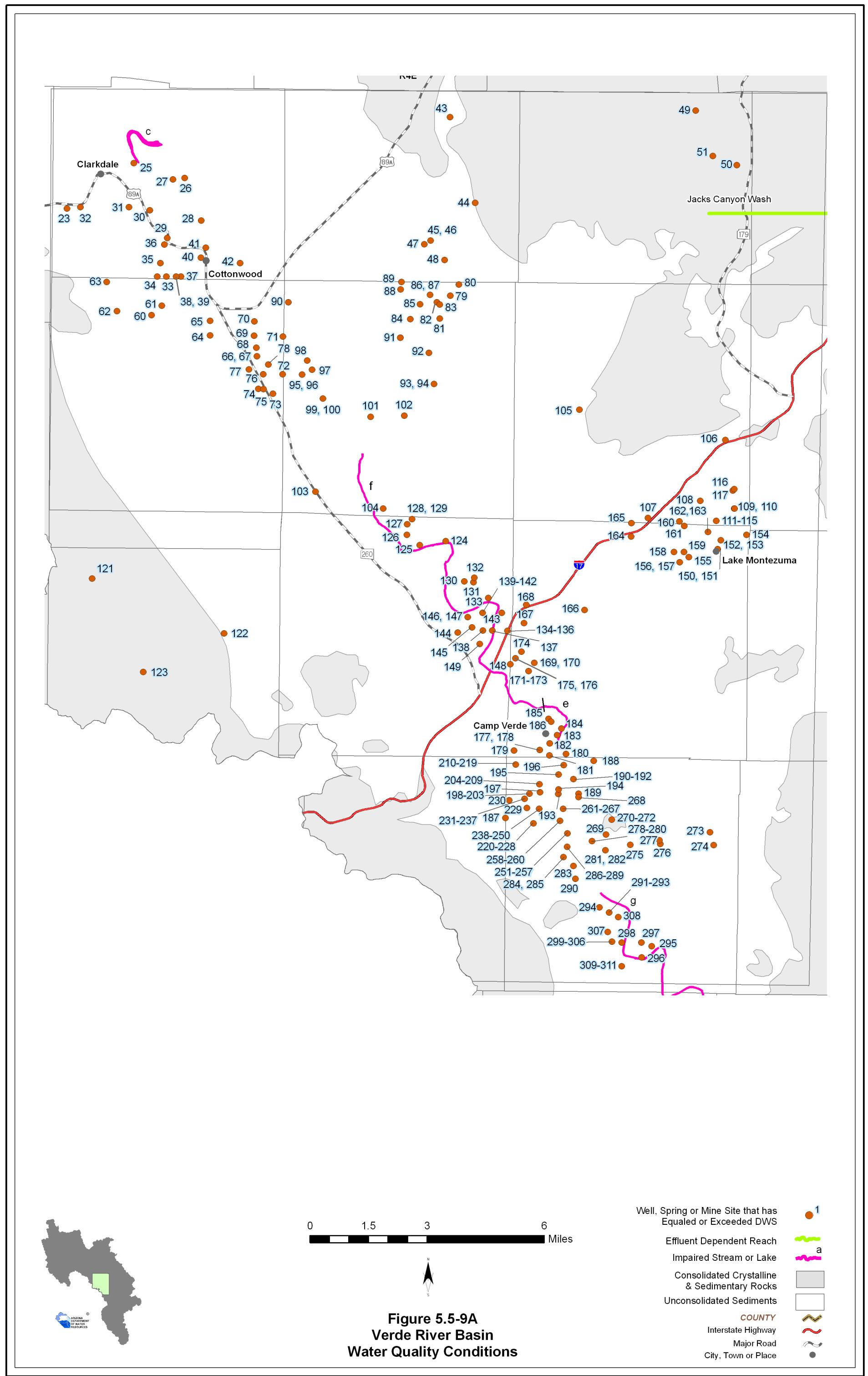
FBC = Full Body Contact

<sup>5</sup>Lake has been dry or nearly dry since 2002









### 5.5.8 Cultural Water Demands in the Verde River Basin

Cultural water demand data including population, number of wells and the average well pumpage and surface water diversions by the municipal, industrial and agricultural sectors are shown in Table 5.5-8. Effluent generation including facility ownership, location, population served and not served, volume treated, disposal method and treatment level is shown in Table 5.5-9. Figure 5.5-10 shows the location of demand centers. A description of cultural water demand data sources and methods is found in Volume 1, Section 1.3.5. More detailed information on cultural water demands is found in Section 5.0.7.

#### Cultural Water Demands

- Refer to Table 5.5-8 and Figure 5.5-10.
- Population in this basin has more than doubled from 36,049 in 1980 to 88,242 in 2000. Projections suggest a slightly smaller rate of growth through 2050 to 165,314.
- In general, groundwater use has increased since 1971, from an average of 16,000 acre-feet per year in 1971-1975 to an average of 23,900 acre-feet per year in 2001-2003. The highest average annual groundwater demand was in 1986-1990 when 33,000 acre-feet per year was used.
- Total surface water diversions in this basin have decreased slightly from an average of 18,000 acre-feet per year in 1971-1990 to an average of 17,400 acre-feet per year in 2001-2003.
- Municipal groundwater demand has increased from an average of 7,200 acre-feet per year in 1991-1995 to 10,000 acre-feet per year in 2001-2003. Municipal surface water demand is about 600 acre-feet per year.
- Industrial groundwater use has increased slightly from 2,100 acre-feet per year on average in 1991-1995 to 2,400 acre-feet per year on average in 2001-2003. Industrial surface water use has remained a constant 800 acre-feet per year during this time.
- Groundwater use for irrigation has increased from an average of 8,100 acre-feet per year in 1991-1995 to an average of 11,500 acre-feet per year in 2001-2003. Most of the surface water use in the basin is for irrigation with 11,500 acre-feet per year on average used in 1991-1995 and 16,000 acre-feet per year on average used in 2001-2003.
- Municipal and industrial demand centers are found primarily in the central portion of the basin.
- The only low intensity municipal and industrial demand center identified by the USGS is the National Guard installation at Camp Navajo near Bellemont.
- The majority of the agricultural use is found along the Verde River.
- There are two large mines, Clarkdale Cement and the closed United Verde copper mine, and two small mines or quarries located in the vicinity of Clarkdale and Jerome. An additional small mine or quarry is located north of Sunflower.
- As of 2003 there were 10,654 registered wells with a pumping capacity of less than or equal to 35 gallons per minute and 708 wells with a pumping capacity of more than 35 gallons per minute.

### **Effluent Generation**

- Refer to Table 5.5-9.
- There are 24 wastewater treatment facilities in this basin.
- Information on population served was available for 12 facilities and information on effluent generation was available for 13 facilities. These facilities serve over 43,000 people and generate almost 6,650 acre-feet of effluent per year.
- Of the 13 facilities with information on the effluent disposal method: three discharge to evaporation ponds; three discharge for golf or turf irrigation; one discharges effluent to unlined impoundments that recharge the aquifer; five discharge to a watercourse; and seven discharge for irrigation. In Payson, treated effluent is delivered to a 10.5 acre recreational lake where it is stored to irrigate turf and recharges the aquifer.

Table 5.5-8 Cultural Water Demands in the Verde Basin<sup>1</sup>

Year	Recent (Census) and Projected (DES) Population	Number of Registered Water Supply Wells Drilled		Average Annual Demand (in acre-feet)						Data Source	
				Well Pumpage			Surface-Water Diversions				
		Q ≤ 35 gpm	Q > 35 gpm	Municipal	Industrial	Irrigation	Municipal	Industrial	Irrigation		
1971		4,624 <sup>2</sup>	503 <sup>2</sup>	16,000			18,000			ADWR (1994)	
1972											
1973											
1974											
1975											
1976				16,000			18,000				
1977											
1978											
1979											
1980	36,049										
1981	38,093	1,219	79	19,000			18,000			USGS (2005) ADWR (2005)	
1982	40,137										
1983	42,181										
1984	44,225										
1985	46,269										
1986	48,313			33,000			18,000				
1987	50,357										
1988	52,401										
1989	54,445										
1990	56,489										
1991	59,664	1,161	27	7,200	2,100	8,100	600	800	11,500	USGS (2005) ADWR (2005)	
1992	62,839			8,800			600				
1993	66,015										
1994	69,190										
1995	72,365										
1996	75,541	1,555	27	2,200	8,400	600	800	12,500			
1997	78,716			10,000			600				
1998	81,891										
1999	85,067										
2000	88,242										
2001	89,963	490	13	2,400	11,500	600	800	16,000			
2002	91,683			11,500			600				
2003	93,404										
2010	105,449										
2020	124,325										
2030	140,300										
2040	152,941										
2050	165,314										

ADDITIONAL WELLS:<sup>3</sup>

587

8

WELL TOTALS: 10,654

708

**Notes:**

<sup>1</sup> Does not include evaporation losses from stockponds and reservoirs.

<sup>2</sup> Includes all wells through 1980.

<sup>3</sup> Other water-supply wells are listed in the ADWR Well Registry for this basin, but they do not have completion dates. These wells are sumr

**Table 5.5-9 Effluent Generation in the Verde River Basin**

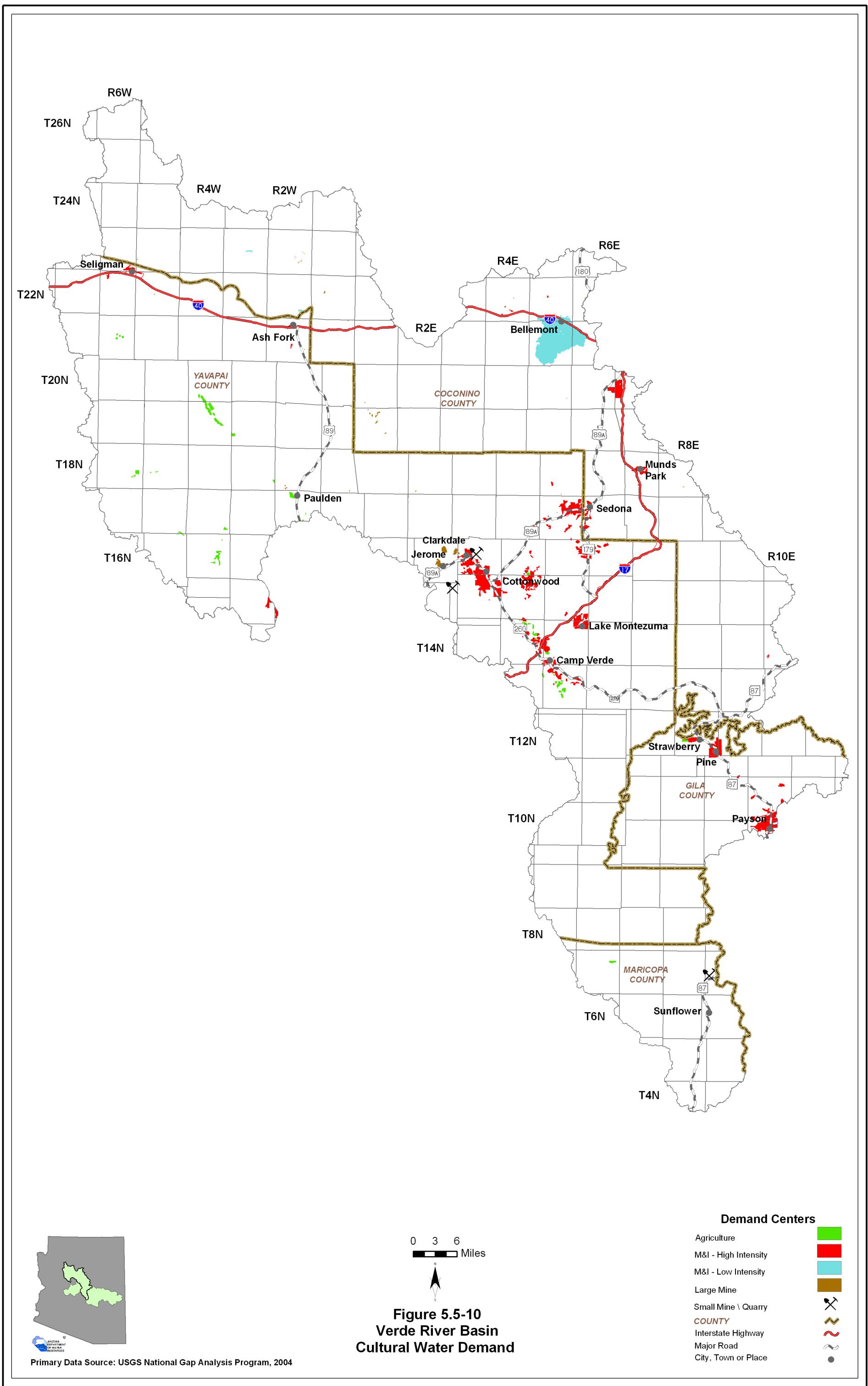
Facility Name	Ownership	City/Location Served	Population Served	Disposal Method				Current Treatment Level	Population Not Served	Year of Record
				Volume Treated/Generated (acre-feet/year)	Water-course Evaporation Pond	Irrigation	Golf Course/Turf Irrigation			
American Gulch	Northern Gila County SD	Payson	8,000	2,240	X	X	Paysan, Chaparral & Rim	X	X	2004
American Ranch WWTF	NA	Prescott								
Big Park ID	Yavapai County	Sedona	2,500	224		X			Secondary	NA
Camp Verde WWTF	Camp Verde SD	Camp Verde	2,500	194	X				Secondary	1999
Clarkdale WWTF	Clarkdale	Clarkdale	1,920	291	X	X			Secondary	2000
Cottonwood WWTF	Cottonwood	Cottonwood	8,500	1,008		X			Secondary	2002
Crimson View WWTP	NA	Sedona							Adv. Trt. I	1,000
Cross Creek Ranch	NA	Sedona								
Flagstaff Meadows	NA	Bellemont	NA	NA	X					
Houston Creek Landing WWTP	NA	Star Valley								
Inscription Canyon Ranch	Private	Prescott	NA						NA	2002
Jerome WWTF	Jerome	Jerome	700	56	Bitter Creek				Secondary	45
Lolo Mai Springs	Private	NA	420	34					NA	2004
Munds Park/Kay Blackman WWTP	Pinewood SD	Munds Park	10,000	1,176	Munds Creek	X	Pinewood		Adv. Trt. & Nutrient Removal	2001
Oak Creek Property Owners	Private	Oak Creek								
Pine Creek Domestic WWTF	Private	Pine							NA	1999
Portia Pine Creek WWTP	NA	Strawberry/Pine							NA	

**Table 5.5-9 Effluent Generation in the Verde River Basin (cont'd)**

Facility Name	Ownership	City/Location Served	Population Served	Volume Treated/Generated (acre-feet/year)	Disposal Method				Current Treatment Level	Population Not Served	Year of Record
					Water-course	Evaporation Pond	Irrigation	Golf Course/Turf Irrigation			
Sedona Venture WWTF	Private	Sedona	240	45	Unnamed tributary to Oak Cr.					N/A	NA
Sedona WWTF	Sedona	Sedona	8,000	1,288		X				Adv. Trt. II & Nutrient Removal	2,500
Seligman WWTF	Yavapai County SD	Seligman	84	9		X				Secondary	324
Shelby Dr. WWTP	Private	Sedona	NA							NA	2003
Thunder Mountain Ranch WWTP	NA	Sedona	NA							NA	2001
Verde Santa Fe	Private	Cornville	NA	55			X				2004
<b>Totals</b>				42.64	6,617						

NA: Data not currently available to ADWR  
WWTF: Waste Water Treatment Facility  
WWTP: Waste Water Treatment Plant  
WRP: Water Reclamation Plant  
SD: Sanitation District  
ID: Improvement District





## 5.5.9 Water Adequacy Determinations in the Verde River Basin

Water adequacy determination information including the subdivision name, location, number of lots, adequacy determination, reason for the inadequacy determination, date of determination and subdivision water provider are shown in Table 5.5-10. Figure 5.5-11 and 5.5-11A show the locations of subdivisions keyed to the Table. A description of the Water Adequacy Program is found in Volume 1, Appendix A. Adequacy determination data sources and methods are found in Volume 1, Sections 1.3.1.

### Water Adequacy Reports

- See Table 5.5-10
- A total of 375 water adequacy determinations have been made in this basin through May, 2005.
- 110 determinations of inadequacy have been made.
- The most common reason for an inadequacy determination in Gila and Coconino counties is because the applicant did not submit the necessary information and/or the available hydrologic data was insufficient to make a determination. The most common reason for an inadequacy determination in Yavapai County is water quality.
- Other reasons for an inadequacy determination included: the existing supply was unreliable or physically unavailable or groundwater exceeds the depth-to-water criteria; and the applicant failed to demonstrate a legal right to use the water or failed to demonstrate their legal authority to serve the subdivision. For three subdivisions the reason for the inadequacy determination is unknown because the records could not be located.
- The number of lots receiving a water adequacy determination, by county, are:

County	Number of Subdivision Lots	Number of Lots Determined to be Adequate	Percent Adequate
Coconino County	6,188	5,668	92%
Gila County	>4,652	>717	~15%
Maricopa County	20	20	100%
Yavapai County	>18,645	>16,153	~87%

**Table 5.5-10 Adequacy Determinations in the Verde River Basin<sup>1</sup>**

Map Key	Map Location <sup>2</sup>	Subdivision Name	County	Location			No. of Lots	ADWR File No. <sup>3</sup>	ADWR Adequacy Determination	Reason(s) for Inadequacy Determination <sup>4</sup>	Date of Determination	Water Provider at the Time of Application
				Township	Range	Section						
1	A	Aerie I and Aerie II	Yavapai	17 North	5 East	5	74	22-401588	Adequate		07/06/05	The Aerie Conservancy
2	I	Alpine Ridge	Gila	11 North	10 East	34	7		Inadequate	A1,A2	01/12/82	Town of Payson
3	I	Alpine Village # 1	Gila	11 North	10 East	33	312		Inadequate	A1,A2	07/16/85	Town of Payson
4	A	Amigos Rancheros	Yavapai	17 North	5 East	29	105		Inadequate	B	08/20/87	NA
5	A	Anasazi	Cocino	17 North	6 East	7	11		Adequate		05/01/81	Arizona Water Company
6	M	Antelope Lakes # 1	Yavapai	18 North	2 West	27	22	22-300068	Adequate		11/06/95	co-op water system
7	M	Antelope Lakes # 2	Yavapai	18 North	2 West	27	655		Adequate		02/19/97	Antelope Lakes Water Company, Inc.
8	M	Antelope Lakes # 3	Yavapai	18 North	2 West	28	44		Adequate		03/14/88	Dry Lot Subdivision
9	A	Arena del Loma Estates	Yavapai	14 North	5 East	19	11	22-300031	Adequate		07/28/85	Dry Lot Subdivision
10	M	Arizona Homes # 3	Cocino	22 North	1 East	22	NA		Adequate		06/07/73	Northwest Water Company
11	M	Arizona Homes # 4	Cocino	22 North	1 East	22	NA		Adequate		04/08/77	Northwest Water Company
12	A	Arnold Terrace	Yavapai	14 North	5 East	31	18		Adequate		07/09/74	Camp Verde Water System
13	A	Arroyo Roble Resort	Cocino	17 North	6 East	8	72		Adequate		05/18/83	Arizona Water Company
14	A	Arroyo Seco	Yavapai	17 North	5 East	10	46		Adequate		07/12/91	Arizona Water Company
15	A	Arroyo Sienna	Yavapai	17 North	6 East	18	12	22-400647	Adequate		02/12/02	Arizona Water Company
16	A	Aspen Shadows	Yavapai	16 North	3 East	34	36	22-300478	Adequate		07/22/98	Cottonwood Water Works, Inc.
17	A	Back O' Beyond Ranch	Cocino	17 North	6 East	30	80	22-300211	Adequate		10/23/96	Arizona Water Company
18	A	Beaver Creek Acres	Yavapai	14 North	5 East	11	36	22-401502	Adequate		01/20/05	Dry Lot Subdivision
19	A	Beaver Creek Golf Club	Yavapai	14 North	5 East	1	137	22-401848	Adequate		10/18/05	Arizona Water Company - Rimrock
20	M	Beaver Valley Estates	Gila	115 North	10 East	35	8		Inadequate	A1,A2	03/05/86	Beaver Valley Water Company
21	A	Bell Rock Vista	Yavapai	16 North	6 East	18	6		Adequate		06/15/89	Big Park Water Company
22	A	Bella Terra on Oak Creek	Yavapai	17 North	5 East	26	106	22-401631	Adequate		10/31/81	Arizona Water Company - Sedona
23	A	Black Hill Industrial Park	Yavapai	16 North	3 East	33	24		Adequate		05/13/87	Cottonwood Water Works, Inc.
24	A	Black Hills Estates	Yavapai	16 North	3 East	32	66		Adequate		06/20/74	Cottonwood Water Works, Inc.
25	A	Black Hill's Estates # 2	Yavapai	16 North	3 East	32	80		Adequate		06/27/80	Cottonwood Water Works, Inc.
26	A	Black Hills Terrace	Yavapai	16 North	3 East	32,33	18		Adequate		05/08/80	Cottonwood Water Works, Inc.
27	M	Bonita Creek	Gila	12 North	11 East	32	38		Inadequate	A1	06/06/75	Dry Lot Subdivision
28	M	Boynton Canyon Ranch	Yavapai	18 North	5 East	20,29	12		Adequate		06/27/80	Homeowners Association Wells
29	A	Butler Subdivision	Yavapai	14 North	5 East	30	9		Inadequate	C	03/25/80	Dry Lot Subdivision
30	A	Butterfield Plaza	Yavapai	16 North	5 East	13	46		Adequate		06/06/83	Big Park Water Company
31	A	Camp Verde Acres	Yavapai	13 North	5 East	34	53		Adequate		06/24/81	Dry Lot Subdivision
32	A	Camp Verde Townsite, Block 7	Yavapai	14 North	5 East	31	5		Adequate		10/04/83	Camp Verde Water System

**Table 5-10 Adequacy Determinations in the Verde River Basin (cont'd)<sup>1</sup>**

Map Key	Map Location <sup>2</sup>	Subdivision Name	County	Location			No. of Lots	ADWR File No. <sup>3</sup>	ADWR Adequacy Determination	Reason(s) for Inadequacy Determination <sup>4</sup>	Date of Determination	Water Provider at the Time of Application
				Township	Range	Section						
33	A	Canyon Mesa County Club	Yavapai	16 North	6 East	18	109		Adequate		08/27/84	Big Park Water Company
34	A	Canyon Mesa County Club # 2	Yavapai	16 North	6 East	18	44		Adequate		12/12/85	Big Park Water Company
35	A	Canyon Mesa County Club # 3	Yavapai	16 North	6 East	18	20	22-400072	Adequate		05/21/99	Big Park Water Company
36	A	Canyon Shadlows	Yavapai	17 North	5 East	1	21		Adequate		07/07/80	Arizona Water Company
37	A	Casa Bonita	Yavapai	17 North	5 East	12	22		Adequate		04/17/81	Arizona Water Company
38	A	Casa Del Sol Condominiums	Yavapai	16 North	3 East	34	28	22-400548	Adequate		08/14/01	Cottonwood Water Works, Inc.
39	A	Condominiums, South	Yavapai	16 North	3 East	34	52	22-401223	Adequate		04/07/04	Cottonwood Water Works, Inc.
40	A	Castle Rock Plaza	Yavapai	16 North	5 East	13	4		Adequate		12/18/85	Big Park Water Company
41	A	Castle Rock Plaza # 2	Yavapai	16 North	5 East	13	6		Adequate		09/20/02	Big Park Water Company
42	A	Cathedral Rock Ranchos	Yavapai	17 North	5 East	35,36	99		Adequate		09/01/81	Dry Lot Subdivision
43	A	Cathedral View # 2	Yavapai	16 North	6 East	18	15		Adequate		07/19/91	Big Park Water Company
44	A	Cave View Estates	Yavapai	13 North	5 East	11	13	22-400595	Adequate		11/01/01	Verde Lakes Water Corp.
45	A	Cedar Ridge	Yavapai	17 North	5 East	11	49		Adequate		12/26/78	Arizona Water Company
46	I	Cedar Ridge Phase 1	Gila	11 North	10 East	32	8	22-401441	Inadequate	A1	10/21/04	Town of Payson Water Company
47	I	Chalet Village	Gila	11 North	10 East	33,34	48		Inadequate	A1,A2	12/27/74	United Utilities Company
48	A	Chapel View	Yavapai	17 North	6 East	30	17		Adequate		08/21/73	Arizona Water Company
49	M	Cimmeron Pines	Gila	12 North	9 East	30	64		Inadequate	A1	07/06/82	E & R Water Company
50	A	Clarkdale Palisades	Yavapai	16 North	3 East	29	50		Adequate		04/17/75	Cottonwood Water Company
51	A	Clarkdale Palisades # 3	Yavapai	16 North	3 East	29	84		Adequate		09/26/75	Cottonwood Water Company
52	A	Clarkdale Palisades # 4	Yavapai	16 North	3 East	29	112		Adequate		08/25/75	Cottonwood Water Company
53	A	Cliffs at Cup of Gold	Yavapai	17 North	5 East	33	8	22-300060	Adequate		11/01/95	Dry Lot Subdivision
54	A	Cliffs, The	Yavapai	14 North	5 East	31	42		Adequate		09/02/94	Camp Verde Water System
55	A	Cliffs, Unit 2 North	Yavapai	14 North	5 East	31	29	22-300164	Adequate		07/23/96	Camp Verde Water System
56	A	Cliffs, Unit 2 South	Yavapai	14 North	5 East	31	30	22-400433	Adequate		12/05/00	Camp Verde Water System
57	A	Coffee Pot Lodge	Yavapai	17 North	5 East	1	27		Adequate		02/10/84	Arizona Water Company
58	A	Copper Vista Estates	Yavapai	17 North	5 East	13	42		Adequate		07/06/79	Oak Creek Water Company, #1
59	A	Cottages at Coffee Pot	Yavapai	17 North	5 East	1	37		Adequate		06/27/86	Arizona Water Company
60	A	Cottonwood Apark	Yavapai	16 North	3 East	33	18		Adequate		07/19/85	Cottonwood Water Works, Inc.
61	A	Cottonwood Business Park	Yavapai	16 North	3 East	34	10		Adequate		10/09/81	Clemencau Water Company
62	A	Commons/Cottonwood	Yavapai	15 North	3 East	2	178	22-400318	Adequate		06/01/00	Cottonwood Water Works, Inc.
63	A	Cottonwood Ranch	Yavapai	16 North	3 East	32,33	627	22-300096	Adequate		05/13/96	Cottonwood Water Works, Inc.
64	A	Cottonwood Springs	Yavapai	15 North	3 East	17,20	n/a		Adequate		08/04/80	Quail Springs Ranch Water Company

**Table 5.5-10 Adequacy Determinations in the Verde River Basin (cont'd)<sup>1</sup>**

Map Key	Map Location <sup>2</sup>	Subdivision Name	County	Location			No. of Lots	ADWR File No. <sup>3</sup>	ADWR Adequacy Determination	Reason(s) for Inadequacy Determination <sup>4</sup>	Date of Determination	Water Provider at the Time of Application	
				Township	Range	Section							
65	A	County Estates # 3	Yavapai	13 North	5 East	7	19		Inadequate	C	12/04/73	Dry Lot Subdivision	
66	A	County Estates # 4	Yavapai	13 North	5 East	7	14		Inadequate	C	03/14/84	Dry Lot Subdivision	
67	A	Courthouse Butte Estates	Yavapai	17 North	5 East	27	60		Adequate		06/15/79	Community well	
68	A	Crestview	Yavapai	15 North	3 East	3	91	22-300022	Adequate		06/16/95	Cottonwood Water Works	
69	A	Crestview Phase 3	Yavapai	15 North	3 East	3	40	22-400345	Adequate		07/19/00	Cottonwood Water Works, Inc.	
70	A	Crimson View	Yavapai	17 North	5 East	11	91	22-300088	Adequate		02/29/96	Arizona Water Company	
71	A	Cross Creek Ranch	Yavapai	17 North	5 East	33	84	22-400694	Adequate		04/09/03	Cross Creek Ranch Community Association	
72	A	Diamond Creek Ranch	Yavapai	13 North	5 East	8	27	22-400199	Inadequate	C	11/02/99	Dry Lot Subdivision	
73	A	Diamond Creek Ranch North	Yavapai	13 North	5 East	8	22	22-401353	Inadequate	C	06/10/04	NA	
74	A	Distant Drums	Yavapai	17 North	5 East	9	6		Adequate		02/06/76	Arizona Water Company	
75	A	Doodlebug # 2	Coconino	17 North	6 East	19	42		Adequate		04/15/74	Arizona Water Company	
76	M	Eagle Glen Townhouses	Gila	12 North	8 East	36	57		Inadequate	A1	02/16/84	E & R Water Company	
77	A	Eagle Rock Subdivision	Yavapai	17 North	5 East	11	26	22-401545	Adequate		02/02/05	Arizona Water Company - Sedona	
78	M	Evilive Acres	Gila	11 North	5	10 East	20	30		Inadequate	A1, A2	03/22/88	United Utilities Company
79	M	Enchantment, John Gardiner's	Yavapai	18 North	5 West	20, 29	118		Adequate		04/18/86	Homeowners' Association Wells	
80	A	Equestrian Estates	Yavapai	14 North	4 East	14	44	22-401613	Adequate		04/20/05	Camp Verde Water System	
81	A	Estrella Noche Ranch	Yavapai	17 North	4 East	1, 36	10	22-300591	Adequate		01/14/99	Homeowners' Association Wells	
82	A	Fairfield Sedona	Yavapai	17 North	5 East	11, 14	114	22-400109	Adequate		08/02/99	Arizona Water Company	
83	A	Fairway Oaks	Yavapai	16 North	5 East	13	8		Adequate		01/07/87	Big Park Water Company	
84	I	Fairway Oaks Estates replat	Gila	10 North	10 East	5, 6	23		Inadequate	A1, A2	03/10/83	Town of Payson	
85	I	Falcon View	Gila	11 North	10 East	33	57	22-300027	Inadequate	A2	10/03/95	Town of Payson	
86	M	Flagstaff Meadows Unit 1	Coconino	21 North	5 East	1	133	22-400692	Inadequate	A1	03/22/02	Homeowners' Association Wells	
87	M	Flagstaff Meadows Unit 2	Coconino	21 North	5 East	1	88	22-401174	Inadequate	A1	02/04/04	Utility Source LLC	
88	A	Foothill Terrace	Yavapai	18 North	3 East	29	140		Adequate		05/05/83	Cottonwood Water Works, Inc.	
89	A	Foothills North	Yavapai	17 North	5 East	3, 7	21		Adequate		02/20/79	Arizona Water Company	
90	A	Foothills South	Yavapai	17 North	5 East	10	64		Adequate		06/18/74	Arizona Water Company	
91	A	Foothills South # 2 Amended	Yavapai	17 North	5 East	15	n/a		Adequate		12/22/82	Arizona Water Company	
92	A	Foothills South Unit 3	Yavapai	17 North	5 East	15	25	22-401029	Adequate		09/18/03	Arizona Water Co.	
93	A	Foothills South Unit 4	Yavapai	17 North	5 East	15	8	22-401826	Adequate		09/08/05	Arizona Water Company	
94	M	Forest Highlands	Coconino	20 North	7 East	19	655		Adequate		03/24/88	Forest Highlands Water Company	
95	M	Forest Highlands Unit Five	Coconino	20 North	7 East	18	170	22-300321	Adequate		08/22/97	Forest Highlands Water Company	

**Table 5.5-10 Adequacy Determinations in the Verde River Basin (cont'd)<sup>1</sup>**

Map Key	Map Location <sup>2</sup>	Subdivision Name	County	Location			No. of Lots	ADWR File No. <sup>3</sup>	ADWR Adequacy Determination	Reason(s) for Inadequacy Determination <sup>4</sup>	Date of Determination	Water Provider at the Time of Application
				Township	Range	Section						
96	I	Forest Park	Gila	10 North	10 East	3	12		Adequate		08/08/73	United Utilities Company
97	I	Forest Park # 1	Gila	10 North	10 East	4	28		Inadequate	A1,A2	05/20/80	United Utilities Company
98	I	Forest Park # 2	Gila	10 North	10 East	3	121		Inadequate	A1,A2	02/08/80	United Utilities Company
99	I	Forest Park # 3	Gila	10 North	10 East	4	10		Inadequate	A1,A2	08/11/88	Town of Payson
100	M	Forest Ranch # 1	Coconino	22 North	4 East	13, 24	10		Inadequate	A2, A3	01/13/87	Dry Lot Subdivision
101	I	Four Seasons North	Gila	11 North	10 East	34	48		Inadequate	A1,A2	05/18/83	Town of Payson
102	M	Foxboro Ranch Estates	Coconino	17 North	7 East	3	57	22-401577	Adequate		02/10/05	Foxboro Ranch Domestic Water Improvement District
103	I	Frontier Condominiums	Gila	10 North	10 East	4	42	22-300091	Inadequate	A2	01/16/96	Town of Payson
104	I	Frontier Townhouses	Gila	10 North	10 East	9	8		Inadequate	A1, A2	06/17/80	United Utilities Company
105	A	Gateway Commercial Complex Unit 1	Yavapai	14 North	4 East	23	8	22-401794	Adequate		08/04/05	Camp Verde Water System
106	A	Golden Heights	Yavapai	14 North	4 East	12, 13	44		Adequate		07/17/80	Camp Verde Water System
107	I	Green Valley Estates	Gila	10 North	10 East	8, 9	53		Inadequate	A1, A2	04/26/94	Town of Payson
108	I	Green Valley Estates 2	Gila	10 North	10 East	8, 9	14	22-400849	Inadequate	A1	11/25/02	Town of Payson
109	I	Greenfaire	Gila	10 North	10 East	8	11		Inadequate	A1, A2, C	10/27/94	Town of Payson
110	I	Greenfaire # 2	Gila	10 North	10 East	8	8	22-300216	Inadequate	A1	10/31/96	Town of Payson
111	M	Guerremont	Gila	12 North	8 East	21	10		Inadequate	A1	07/17/84	E & R Water Company
112	A	Harmony Heights North	Yavapai	17 North	5 East	11	45		Adequate		01/18/78	Arizona Water Company
113	A	Haskell Springs	Yavapai	16 North	3 East	32	150	22-300011	Adequate		05/24/95	Cottonwood Water Works
114	M	Headwaters Ranch Country Club	Yavapai	17 North	2 West	2	765		Adequate		06/18/93	Juniper Wells Water Company
115	M	Headwaters Ranch Country Club 2	Yavapai	18 North	2 West	35	620		Adequate		06/18/93	Juniper Wells Water Company
116	M	Hidden Pines	Gila	12 North	8 East	25	49		Inadequate	A1	10/19/1995	Williamson Waterworks, Inc.
117	M	Hidden Pines Phase II	Gila	12 North	8 East	25	18	22-300182	Inadequate	A1, A2	08/08/96	Williamson Waterworks, Inc.
118	A	Highland Estates # 2	Yavapai	16 North	5 East	11	47		Adequate		11/01/79	Little Park Water Company
119	A	Hillcrest Villa	Yavapai	15 North	3 East	2	10		Adequate		03/22/94	Cottonwood Water Works, Inc.
120	M	Holiday Lake Estates	Yavapai	18 North	2 West	33, 34	1543	22-300240	Inadequate	A1,B	02/07/97	Altra Water Company, Inc.
121	M	Homestead at Camp Verde	Yavapai	14 North	4 East	25, 30, 31, 36	165	22-400441	Adequate		12/18/00	Camp Verde Water System
122	M	Homestead, The	Gila	12 North	8 East	20	25		Inadequate	A1	01/18/04	E & R Water Company
123	M	Hunt Ranch # 01	Gila	12 North	8 East	20	8		Inadequate	A1	07/21/93	E & R Water Company
124	A	Hyatt Pinon Point/The Y Project	Coconino	17 North	6 East	7	218	22-400946	Adequate		05/16/03	Arizona Water Company - Sedona
125	A	Indian Cliffs	Coconino	17 North	6 East	30	41		Adequate		09/15/02	Arizona Water Company
126	M	Inscription Canyon Ranch	Yavapai	16 North	3 West	27, 28	323	22-300021	Adequate		11/15/05	ICR Water Users Association
127	M	Inscription Canyon Ranch Unit 5	Yavapai	16 North	3 West	27, 28	46	22-400551	Adequate		09/14/01	ICR Water Users Association

**Table 5.5-10 Adequacy Determinations in the Verde River Basin (cont'd)<sup>1</sup>**

Map Key	Map Location <sup>2</sup>	Subdivision Name	County	Township	Range	Section	No. of Lots	ADWR File No. <sup>3</sup>	ADWR Adequacy Determination	Reason(s) for Inadequacy Determination <sup>4</sup>	Date of Determination	Water Provider at the Time of Application
128	A	J.D. Stump Subdivision	Yavapai	14 North	5 East	2	8		Adequate		09/27/88	Dry Lot Subdivision
129	M	John Gardner's Enchantment Resort	Yavapai	18 North	5 East	20, 29	19	22-400266	Adequate		02/28/00	Boynton Canyon Enchantment Homeowners
130	A	Jordan Meadows # 2	Yavapai	13 North	5 East	7	10		Inadequate	A1	02/24/76	Dry Lot Subdivision
131	A	Jordan Meadows # 3	Yavapai	13 North	5 East	7	6		Inadequate	A1	03/26/79	Dry Lot Subdivision
132	A	Jordan Park Glen	Coconino	17 North	6 East	6	20		Adequate		12/06/91	Arizona Water Company
133	A	Jordan Park Ridge	Coconino	17 North	6 East	5	39		Adequate		12/29/93	Arizona Water Company
134	A	Jordan Road Condominiums	Coconino	17 North	6 East	5	4		Adequate		04/30/81	Arizona Water Company
135	A	Jordan Road Condominiums B	Coconino	17 North	6 East	8	9	22-400722	Adequate		6/14/2002	Arizona Water Company
136	A	Jordan Road 540	Coconino	17 North	6 East	8	8		Adequate		11/15/82	Arizona Water Company
137	M	Juniper Meadows	Yavapai	17 North	5 West	29	42		Adequate		05/07/92	Juniper Meadows Water Users'
138	M	Junipine Oak Creek	Coconino	18 North	6 East	5, 8	50		Adequate		03/21/86	Junipine Community Property Owners
139	M	Kachina Village	Coconino	20 North	7 East	20	3000		Adequate		08/25/75	Flagstaff, City of
140	A	Kindra Heights	Yavapai	16 North	3 East	28	21	22-401150	Adequate		01/28/04	Cottonwood Water Works, Inc.
141	A	Kinsey Estates at Western Hills	Yavapai	17 North	5 East	11	9	22-401397	Adequate		09/15/04	Arizona Water Company-Sedona
142	A	Kinsey Estates Two at Western Hills	Yavapai	17 North	5 East	11	9	22-401603	Adequate		03/30/05	Arizona Water Company - Sedona
143	A	Koch Ranch Estates	Yavapai	15 North	4 East	15	35	22-401913	Adequate		12/01/05	Dry Lot Subdivision
144	A	La Barranca	Yavapai	16 North	6 East	17, 18	76	22-300502	Adequate		09/08/98	Big Park Water Company
145	A	Lakeside Townhouses	Yavapai	14 North	5 East	2	10		Adequate		05/27/83	Arizona Water Company
146	A	Las Estancias	Yavapai	14 North	4 East	14	26	22-400398	Adequate		10/25/00	Camp Verde Water System
147	A	Las Oficinas Office Building	Yavapai	17 North	5 East	12	6		Adequate		10/22/84	Arizona Water Company
148	A	Las Piedras	Yavapai	16 North	6 East	19	152	22-300413	Adequate		05/15/98	Big Park Water Company
149	A	Les Springs	Coconino	17 North	6 East	7, 18	106		Adequate		08/28/85	Arizona Water Company
150	A	Loma Sinagua	Yavapai	15 North	3 East	2	195	22-300084	Adequate		01/10/96	Cottonwood Water Works, Inc.
151	M	Long Meadow Ranch - Unit 3	Yavapai	16 North	3 West	19	6	22-401596	Inadequate	A1	12/29/04	Dry Lot Subdivision
152	A	Los Arriagados Timeshare	Coconino	17 North	6 East	18	175		Adequate		12/09/88	Arizona Water Company
153	A	Los Lomas	Yavapai	17 North	5 East	15	92		Adequate		11/09/82	Arizona Water Company
154	I	Lovett Place	Gila	11 North	10 East	28	18	22-300113	Inadequate	A2	03/15/96	Town of Payson
155	A	Lucky Canyon Estates	Yavapai	13 North	4 East	1	6	22-401490	Inadequate	A1	12/08/04	Dry Lot Subdivision
156	M	Maine Townsite	Coconino	22 North	4 East	26	9		Inadequate	A2, A3	07/29/77	Dry Lot Subdivision
157	M	Malapai Ridge Estates	Yavapai	17 North	2 West	9	25		Adequate		07/11/88	Dry Lot Subdivision

**Table 5.5-10 Adequacy Determinations in the Verde River Basin (cont'd)<sup>1</sup>**

Map Key	Map Location <sup>2</sup>	Subdivision Name	County	Township	Range	Section	No. of Lots	ADWR File No. <sup>3</sup>	ADWR Adequacy Determination	Reason(s) for Inadequacy Determination <sup>4</sup>	Date of Determination	Water Provider at the Time of Application
158	I	Manzanita Hills # 1	Gila	10 North	10 East	5	11		Inadequate	A1, A2, C	01/17/95	Town of Payson
159	A	Manzanita Hills # 2	Coconino	17 North	6 East	7	14		Adequate		04/15/74	Arizona Water Company
160	M	Manzanita Hills # 2	Gila	11 North	10 East	5	22		Inadequate	A1, A2, C	01/18/95	Town of Payson
161	I	Manzanita Hills # 3	Gila	10 North	10 East	5	7	22-300461	Inadequate	A1	05/15/98	Town of Payson
162	I	Manzanita Hills # 4	Gila	10 North	10 East	5	19	22-400739	Inadequate	A1	06/18/02	Town of Payson
163	I	Manzanita Hills # 5	Gila	11 North	10 East	32	8	22-400905	Inadequate	A1	03/31/03	Town of Payson
164	I	Manzanita Woods	Gila	11 North	10 East	32	6	22-300462	Inadequate	A1	05/15/98	Town of Payson
165	A	Maybell Estates	Yavapai	13 North	5 East	6	5		Adequate		10/11/74	Camp Verde Water System
166	I	Mazatzal Mountain Airpark # 1	Gila	11 North	10 East	32	26	22-300173	Inadequate	A1, A2	08/23/96	Town of Payson
167	I	Mazatzal Mountain Airpark # 2 Phase 2	Gila	11 North	10 East	32	17	22-400805	Inadequate	A1	09/17/02	Town of Payson
168	I	Mazatzal Mountain Airpark # 3 Phase 1	Gila	11 North	10 East	32	12	22-401032	Inadequate	A1	09/03/03	Town of Payson Water Department
169	A	Mei Glio Estates #2	Yavapai	15 North	4 East	3	8		Inadequate	C	02/25/76	Dry Lot Subdivision
170	M	Mesa Del Caballo Tracts, plats 3, 5 & 6	Gila	11 North	10 East	23, 24	12	22-400038	Inadequate	A1, C	03/26/99	Brooke Utilities
171	A	Mesa Verde Estates	Yavapai	14 North	5 East	19, 30	16		Inadequate	C	04/15/80	Dry Lot Subdivision
172	A	Mingus Shadows	Yavapai	16 North	3 East	29	121		Adequate		05/21/82	Cottonwood Water Works, Inc.
173	A	Mingus View Estates	Yavapai	16 North	3 East	32	70		Adequate		01/13/94	Cottonwood Water Works, Inc.
174	M	Mint Creek Ranch	Yavapai	15 North	3 West	2, 11	74		Adequate		11/29/93	Dry Lot Subdivision
175	A	Mission Hills	Yavapai	17 North	5 East	12	81		Adequate		09/26/80	Arizona Water Company
176	A	Morning Sun Condominiums	Yavapai	17 North	5 East	13	74		Adequate		12/31/87	Oak Creek Water Company
177	A	Mountain Estates	Yavapai	13 North	4 East	1	15	22-401186	Adequate		02/02/04	Camp Verde Water System, Inc.
178	A	Mountain Gate	Yavapai	16 North	3 East	19	606	22-401660	Adequate		06/03/05	Cottonwood Water Works, Inc.
179	M	Mountain Rose Ranch	Coconino	21 North	3 East	3	32	22-400914	Inadequate	A1, A2, A3	04/17/03	Individual Wells
180	A	Mountain View Ranchos	Yavapai	15 North	4 East	11	47		Adequate		03/26/79	Dry Lot Subdivision
181	M	Mountainaire # 5	Coconino	20 North	7 East	28	522		Adequate		07/29/93	Ponderosa Utility Corporation
182	I	Mountain Aire Condominiums	Gila	11 North	10 East	34	4		Inadequate	A1, A2	06/14/82	Town of Payson
183	I	Mountain Aire Condominiums # 3	Gila	11 North	10 East	34	8		Inadequate	A1, A2	09/10/85	Town of Payson
184	M	Mountainaire Meadows	Coconino	20 North	7 East	28	20		Adequate		05/05/83	Ponderosa Utility Corporation
185	A	Mystic Hills	Coconino	17 North	6 East	19	144		Adequate		09/15/92	Arizona Water Company
186	A	Nepenthe	Yavapai	17 North	5 East	14	182	22-300083	Adequate		01/16/96	Arizona Water Company
187	A	Nizhoni Village	Yavapai	16 North	5 East	13	40		Adequate		11/07/80	Big Park Water Company
188	A	North Slopes # 3, Lots 33-55	Yavapai	17 North	5 East	3	23	22-300258	Adequate		07/03/97	Arizona Water Company

**Table 5.5-10 Adequacy Determinations in the Verde River Basin (cont'd)<sup>1</sup>**

Map Key	Map Location <sup>2</sup>	Subdivision Name	County	Location			No. of Lots	ADWR File No. <sup>3</sup>	ADWR Adequacy Determination	Reason(s) for Inadequacy Determination <sup>4</sup>	Date of Determination	Water Provider at the Time of Application
				Township	Range	Section						
189	A	Northern Shadows	Yavapai	17 North	5 East	12	NA		Adequate		07/18/83	Arizona Water Company
190	A	Northview	Yavapai	17 North	5 East	13	121		Adequate		11/29/73	Oak Creek Water Company, #1
191	I	Northwoods	Gila	11 North	10 East	34	72	22-300199	Inadequate	A1, A2	11/08/96	Town of Payson
192	A	Oak Bend # 2	Yavapai	15 North	4 East	10, 15	12		Adequate		02/04/88	Dry Lot Subdivision
193	A	Oak Creek Country Club Estates	Yavapai	16 North	5 East	13	63		Adequate		02/06/80	Arizona Water Company
194	A	Oak Creek Country Club Estates # 2	Yavapai	16 North	5 East	13	40		Adequate		11/23/81	Arizona Water Company
195	A	Oak Creek Country Club Estates # 3	Yavapai	16 North	5 East	23, 24	57		Adequate		11/23/81	Arizona Water Company
196	A	Oak Creek Estates	Yavapai	16 North	5 East	13	136		Adequate		06/03/81	Big Park Water Company
197	A	Oak Creek Palisades	Yavapai	16 North	4 East	35	15		Inadequate	A1	08/26/73	Dry Lot Subdivision
198	M	Oak Creek Valley # 1 & 3	Yavapai	16 North	4 West	34	135		Adequate		06/21/77	Dry Lot Subdivision
199	M	Oak Creek Valley # 2	Yavapai	16 North	4 West	34	185		Adequate		08/08/79	Oak Creek Valley Water & Sewer
200	A	Orchards # 2	Cocominero	17 North	6 East	6	34		Adequate		08/30/74	Arizona Water Company
201	A	Palisades	Cocominero	17 North	6 East	18	86		Adequate		10/17/78	Arizona Water Company
202	A	Panorama	Yavapai	16 North	3 East	19, 30	22		Adequate		10/30/75	Cottonwood Water Company
203	A	Parago Highlands	Yavapai	17 North	5 East	10, 15	192		Adequate		09/23/74	Arizona Water Company
204	I	Paradise Heights	Gila	10 North	10 East	8, 9	16	22-401022	Inadequate	A1	09/03/03	Town of Payson
205	I	Paradise Heights Phase Two	Gila	10 North	10 East	9	20	22-401547	Inadequate	A1	11/18/04	Town of Payson
206	A	Park Place Condominium	Yavapai	17 North	5 East	15	88	22-401834	Adequate		11/14/05	Arizona Water Company
207	M	Parks Pine	Cocominero	22 North	4 East	26	26		Inadequate	A2, A3	09/20/73	Dry Lot Subdivision
208	M	Paulden Farms	Yavapai	17 North	2 West	4	15		Adequate		03/12/92	Dry Lot Subdivision
209	I	Payson Industrial Park	Gila	10 North	10 East	4	13		Inadequate	D	11/08/88	Town of Payson
210	I	Payson Meadows	Gila	11 North	10 East	27, 28	32		Inadequate	A1, A2	08/07/86	Town of Payson
211	I	Payson Pines	Gila	11 North	10 East	28	127	22-300364	Inadequate	A1	09/30/97	Town of Payson
212	I	Payson Pines Unit 2	Gila	11 North	10 East	28	22	22-400740	Inadequate	A1	06/25/02	Town of Payson
213	A	Pebble Rock	Yavapai	13 North	5 East	5	10	22-401538	Adequate		03/07/05	Cottonwood Water Works, Inc.
214	A	Pecan Acres	Yavapai	16 North	3 East	35	28		Adequate		05/09/79	Cottonwood Water Works, Inc.
215	A	Penny Acres # 2	Yavapai	15 North	3 East	1, 2	8		Adequate		07/27/78	Dry Lot Subdivision
216	A	Piedras Del Rio Condominiums	Yavapai	17 North	5 East	15	18	22-401854	Adequate		11/14/05	Arizona Water Company - Sedona
217	I	Pine Aire	Gila	10 North	10 East	3	28		Inadequate	A1, A2	03/18/80	United Utilities Company
218	M	Pine Mountain Acres	Gila	12 North	9 East	30	32		Inadequate	A1, A2, B	11/26/74	Dry Lot Subdivision
219	M	Pinewood Fairway Condos # 1	Cocominero	18 North	7 East	15	44		Inadequate	A1	01/29/79	Arizona Water Company

**Table 5-5-10 Adequacy Determinations in the Verde River Basin (cont'd)<sup>1</sup>**

Map Key	Map Location <sup>2</sup>	Subdivision Name	County	Location			No. of Lots	ADWR File No. <sup>3</sup>	ADWR Adequacy Determination	Reason(s) for Inadequacy Determination <sup>4</sup>	Date of Determination	Water Provider at the Time of Application
				Township	Range	Section						
220	M	Pinewood Fairway Condos # 2	Cochise	18 North	7 East	15	18		Inadequate	A1	05/14/81	Arizona Water Company
221	M	Pinewood Fairway Condos # 3	Cochise	18 North	7 East	15	8		Inadequate	A1	06/08/81	Arizona Water Company
222	M	Pinewood Fairway Condos # 4	Cochise	18 North	7 East	15	18		Inadequate	A1	11/25/81	Arizona Water Company
223	M	Pinewood Fairway Condos # 5	Cochise	18 North	7 East	15	20		Inadequate	A1	12/09/81	Arizona Water Company
224	A	Pinon Valley Estates	Yavapai	16 North	6 East	18	8		Adequate		08/09/93	Big Park Water Company
225	A	Pinon Woods	Yavapai	16 North	6 East	18	120		Adequate		08/15/83	Big Park Water Company
226	A	Pinon Woods # 2	Yavapai	16 North	6 East	18	28		Adequate		04/05/93	Big Park Water Company
227	A	Pinon Woods # 3	Yavapai	16 North	6 East	18	70	22-300005	Adequate		03/30/95	Big Park Water Company
228	A	Playa del Rio	Yavapai	14 North	4 East	13, 14	183		Adequate		05/13/87	Camp Verde Water Company
229	A	Plaza Wes	Yavapai	17 North	5 East	11	33		Adequate		1/08/84	Arizona Water Company
230	A	Poco Diablo Villas	Cochise	17 North	6 East	19	18		Adequate		10/11/74	Arizona Water Company
231	A	Poco Diablo Villas # 2	Cochise	17 North	6 East	19	33		Adequate		09/28/78	Arizona Water Company
232	M	Ponderosa Paradise # 2	Cochise	16 North	8 East	16	9		Inadequate	D	08/21/89	Stoneman Lake Water Company
233	M	Portal # 3, Pine Canyon	Gila	12 North	8 East	24	NA		Adequate		08/08/99	Myers Water Company
234	M	Portal (Canyon Shadows)	Gila	12 North	8 East	25	NA		Adequate		07/11/73	developer-supplied
235	M	Portal at Pine Creek	Gila	12 North	8 East	25	208		Adequate		08/12/76	Myers Water Company
236	M	Portal at Pine Creek	Gila	12 North	8 East	24	190		Adequate		10/23/81	Myers Water Company
237	M	Portal at Pine Creek	Gila	12 North	8 East	25	73		Inadequate	A1, A2	07/19/94	Williamson Water Works
238	M	Portal at Pine Creek, Canyon # 4, Phase 2	Gila	12 North	8 East	25	7	22-400396	Inadequate	A1	09/22/00	Fine Creek Canyon Domestic Water
239	A	Quail Canyon	Yavapai	15 North	3 East	15	59	22-401819	Adequate		09/08/05	Quail Canyon Domestic Water Improvement District
240	A	Quail Ridge	Yavapai	15 North	3 East	15, 22	53	22-400381	Inadequate	A1, A2	09/18/00	Dry Lot Subdivision
241	M	Quail Springs Ranches	Yavapai	15 North	2 East	15	16		Inadequate	A2	03/25/75	Dry Lot Subdivision
242	A	Rainbow Subdivision	Yavapai	16 North	3 East	34	5		Adequate		01/06/88	Cottonwood Water Works, Inc.
243	A	Ranch Acres	Yavapai	14 North	5 East	30, 31	75		Adequate		10/26/73	Camp Verde Water System
244	M	Ranch at Hidden Valley	Yavapai	17 North	2 West	29	56	22-400349	Inadequate	A2	08/21/00	Dry Lot Subdivision
245	M	Rancho del Oro	Yavapai	18 North	5 East	27	200		Adequate		04/01/81	Rancho del Oro
246	M	Rancho Shangri La	Cochise	18 North	6 East	21	20		Adequate		08/19/81	Shangri La Property Owners Association
247	M	Ravencrest	Yavapai	18 North	2 West	19, 30	29	22-400573	Adequate		09/11/01	Dry Lot Subdivision
248	M	Red Rock Cove	Yavapai	12 North	5 East	13	6		Adequate		01/22/82	Big Park Water Company
249	A	Red Rock Vista	Yavapai	16 North	5 East	23	6		Adequate		03/21/94	Arizona Water Company
250	A	Ridge at Sedona	Yavapai	16 North	5 East	24	8	22-300360	Adequate		10/10/97	Arizona Water Company

**Table 5.5-10 Adequacy Determinations in the Verde River Basin (cont'd)<sup>1</sup>**

Map Key	Map Location <sup>2</sup>	Subdivision Name	County	Location			No. of Lots	ADWR File No. <sup>3</sup>	ADWR Adequacy Determination	Reason(s) for Inadequacy Determination <sup>4</sup>	Date of Determination	Water Provider at the Time of Application
				Township	Range	Section						
251	A	Ridge at Sedona, The	Yavapai	16 North	5 East	24	50		Adequate		02/28/85	Arizona Water Company
252	A	Ridge Casitas # 1	Yavapai	16 North	5 East	24	48		Adequate		10/11/85	Arizona Water Company
253	A	Ridge on Sedona Golf Resort, The	Yavapai	16 North	5 East	24	106	22-300330	Adequate		08/05/97	Arizona Water Company
254	A	Ridge View	Yavapai	16 North	5 East	13	8		Adequate		09/27/89	Big Park Water Company
255	I	Rim Ranch	Gila	11 North	10 East	32	20	22-300547	Inadequate	A1	10/19/98	Town of Payson
256	A	Rim Rock Heights	Yavapai	15 North	5 East	36	36	22-400653	Adequate		02/26/02	Dry Lot Subdivision
257	A	Rim Shadows	Yavapai	17 North	5 East	1	32		Adequate		07/07/80	Arizona Water Company
258	M	Rimrock # 1	Yavapai	17 North	2 West	14, 15, 23	35	22-300008	Adequate		05/26/95	Dry Lot Subdivision
259	M	Rimrock # 2	Yavapai	17 North	2 West	23	52	22-300079	Adequate		12/08/95	Dry Lot Subdivision
260	M	Rimrock North	Yavapai	17 North	2 West	15	17	22-300329	Adequate		07/30/97	Dry Lot Subdivision
261	A	Rio Verde Condominiums	Yavapai	16 North	3 East	34	12		Adequate		11/17/81	Cottonwood Water Works, Inc.
262	A	Rio Verde Ranchos	Yavapai	13 North	5 East	6	34		Inadequate	C	03/17/89	Dry Lot Subdivision
263	A	River Ranch Estates	Yavapai	14 North	4 East	3	18	22-300144	Adequate		06/28/96	Dry Lot Subdivision
264	A	Saddlerock Homes	Yavapai	17 North	5 East	13	116		Adequate		09/11/78	Oak Creek Water Company, #1
265	A	San Carlos Condominium	Yavapai	17 North	5 East	12	40		Adequate		07/24/80	Oak Creek Water Company, #1
266	A	San Patricio Estates	Yavapai	17 North	5 East	12	40		Adequate		09/26/75	Arizona Water Company
267	M	Santa Fe Industrial Sites	Yavapai	18 North	2 West	34	200		Adequate		04/11/94	Abra Water Company, Inc.
268	A	Sawmill Cove	Yavapai	15 North	3 East	2	36		Adequate		01/18/94	Cottonwood Water Works, Inc.
269	A	Sawmill Garden's Patio Homes	Yavapai	15 North	3 East	2	59		Adequate		11/13/85	Cottonwood Water Works, Inc.
270	A	Schuerman Estates	Yavapai	17 North	5 East	26	2		Adequate		01/27/76	Dry Lot Subdivision
271	M	Secluded Homesites	Gila	12 North	9 East	31	NA		Inadequate	A1	03/28/80	Dry Lot Subdivision
272	A	Sedona Gardens	Yavapai	17 North	5 East	15	1		Adequate		11/23/81	Arizona Water Company
273	A	Sedona Golf Resort 1	Yavapai	16 North	5 East	24	19	22-300071	Adequate		12/04/95	Arizona Water Company
274	A	Sedona Golf Resort 2	Yavapai	16 North	5 East	24	94	22-300148	Adequate		06/11/96	Arizona Water Company
275	A	Sedona Golf Resort, Phase 2	Yavapai	16 North	5 East	23, 24	192	22-300401	Adequate		03/31/98	Arizona Water Company
276	A	Sedona Golf Resort Hotel	Yavapai	16 North	5 East	24	225	22-300340	Adequate		08/25/97	Arizona Water Company
277	A	Sedona Heights	Yavapai	17 North	5 East	12	16	22-300273	Adequate		03/25/97	Arizona Water Company
278	A	Sedona San Carlos	Yavapai	17 North	5 East	12	40		Adequate		09/24/90	Oak Creek Water Company
279	M	Sedona Seven Canyons Units I, II, and III	Yavapai	18 North	5 East	27	118	22-400907	Adequate		08/28/03	Seven Canyons Water Company
280	A	Sedona Summit II, Phase 3	Yavapai	17 North	5 East	15	39	22-400124	Adequate		08/24/99	Arizona Water Company
281	A	Sedona Vista Estates	Coconino	17 North	6 East	7	12		Adequate		08/21/80	Arizona Water Company

**Table 5.5-10 Adequacy Determinations in the Verde River Basin (cont'd)<sup>1</sup>**

Map Key	Map Location <sup>2</sup>	Subdivision Name	County	Location			No. of Lots	ADWR File No. <sup>3</sup>	ADWR Adequacy Determination	Reason(s) for Inadequacy Determination <sup>4</sup>	Date of Determination	Water Provider at the Time of Application
				Township	Range	Section						
282	M	Seven Canyons of Sedona	Yavapai	18 North	5 East	27	300	22-300262	Adequate		10/29/97	
283	A	Shadow Rock	Yavapai	17 North	5 East	1	34		Adequate		03/21/80	Arizona Water Company
284	A	Shadowbrook Condominium	Yavapai	17 North	5 East	11	54		Adequate		02/22/88	Arizona Water Company
285	A	Sierra Verde Estates	Yavapai	13 North	5 East	15, 16	30		Inadequate	C	04/12/82	Dry Lot Subdivision
286	A	Silver Springs # 1	Yavapai	15 North	3 East	3	80		Adequate		11/12/80	Cottonwood Water Works, Inc.
287	A	Silver Springs Development	Yavapai	15 North	3 East	3	48		Adequate		10/29/86	Cottonwood Water Works, Inc.
288	A	Silver Springs Garden Homes	Yavapai	15 North	3 East	3	26		Adequate		07/11/94	Cottonwood Water Works, Inc.
289	A	Silver Springs Terrace # 1	Yavapai	15 North	3 East	3	22		Adequate		04/07/81	Cottonwood Water Works, Inc.
290	A	Silverado at Sintonion Ranch	Yavapai	14 North	4 East	25	252	22-401916	Adequate		11/14/05	Camp Verde Water System
291	A	Sky Line Estates	Coconino	17 North	6 East	17	11		Adequate		06/21/91	Arizona Water Company
292	I	Sky Park Industrial	Gila	11 North	10 East	32	64		Inadequate	A1, A2	12/29/83	Town of Payson
293	A	Skyline Estates	Yavapai	15 North	3 East	3	34	22-401481	Adequate		12/13/04	Cottonwood Water Works, Inc.
294	A	Solar Estates	Yavapai	15 North	4 East	11	42		Adequate		10/23/78	Dry Lot Subdivision
295	A	Solar Estates # 1	Yavapai	15 North	4 East	11	2		Adequate		04/26/83	Dry Lot Subdivision
296	M	Solitude Pines # 1	Gila	12 North	9 East	31	115		Inadequate	A1	07/30/84	E & R Water Company
297	M	Solitude Pines # 2.5	Gila	12 North	9 East	31	255		Inadequate	A1	09/11/95	E & R Water Company
298	M	Solitude Trails	Gila	12 North	9 East	31	73		Inadequate	A1	09/28/94	E & R Water Company
299	M	Solitude Trails Unit Four	Gila	12 North	9 East	31	10	22-300580	Adequate		08/16/99	Solitude Trails Domestic Water Improvement District
300	A	Starlight Village # 2	Yavapai	15 North	3 East	3	32		Adequate		01/16/81	Cottonwood Water Works, Inc.
301	I	Stone Creek at Payson	Gila	10 North	10 East	4, 5	130	22-400061	Inadequate	A1	04/21/99	Town of Payson
302	A	Stonridge	Yavapai	14 North	5 East	31	54	22-400904	Adequate		07/21/03	Camp Verde Water System Inc.
303	M	Strawberry Creek Foothills	Gila	12 North	8 East	20	96		Adequate		03/13/80	Myers Water Company
304	M	Strawberry Hollow, Phase I	Gila	12 North	8 East	26	41	22-400383	Inadequate	A1	09/12/00	Strawberry Hollow Development, Inc.
305	M	Strawberry Mountain Shadows # 2, 3	Gila	12 North	8 East	35	134		Adequate		03/31/77	E & R Water Company
306	M	Strawberry Mountain Shadows # 4	Gila	11.5 North	9 East	35	264		Inadequate	A1	02/11/81	E & R Water Company
307	M	Strawknolls # 4 (amended)	Gila	12 North	8 East	22	8		Inadequate	C	11/12/82	Arizona Water Company
308	I	Streams at Payson # 1	Gila	10 North	10 East	4	72		Inadequate	A1, A2	09/06/85	Town of Payson
309	A	Sun Dance Townhouses	Yavapai	16 North	5 East	13	58		Adequate		02/28/80	Big Park Water Company
310	M	Sundown Acres	Yavapai	15 North	3 West	24	8		Adequate		12/16/74	Dry Lot Subdivision
311	A	Sunrise Cliffs	Yavapai	17 North	5 East	1	6		Adequate		08/21/86	Arizona Water Company
312	A	Sunset Hills	Yavapai	17 North	5 East	19	466		Adequate		03/21/74	Big Park Water Company

**Table 5-10 Adequacy Determinations in the Verde River Basin (cont'd)<sup>1</sup>**

Map Key	Map Location <sup>2</sup>	Subdivision Name	County	Location			No. of Lots	ADWR File No. <sup>3</sup>	ADWR Adequacy Determination	Reason(s) for Inadequacy Determination <sup>4</sup>	Date of Determination	Water Provider at the Time of Application
				Township	Range	Section						
313	A	Sunset Plaza	Yavapai	17 North	5 East	11	8		Adequate		05/14/76	Arizona Water Company
314	A	Sunup Ranch	Yavapai	16 North	5 East	14	16	22-401418	Adequate		09/15/04	Arizona Water Company
315	A	Swinging Bridge Estates	Yavapai	16 North	4 East	34	18		Adequate		06/12/79	Dry Lot Subdivision
316	A	Sycamore Farms	Yavapai	16 North	3 East	35	17		Adequate		01/01/79	Cottonwood Water Works, Inc.
317	A	Sycamores II <sup>1</sup>	Yavapai	14 North	5 East	1	6		Adequate		08/26/83	Arizona Water Company
318	M	Talking Rock Ranch Phase <sup>1</sup>	Yavapai	16 North	3 West	15, 16, 22	198	22-400519	Adequate		08/17/01	ICR Water Users Association
319	M	Talking Rock Ranch Phase 2 & 3 <sup>4a</sup>	Yavapai	16 North	3 West	15, 22	127	22-400675	Adequate		03/14/02	ICR Water Users Association, Inc.
320	M	Talking Rock Ranch Phase 4a	Yavapai	16 North	3 West	19	10	22-400758	Adequate		07/30/02	ICR Water Users Association, Inc.
321	M	Talking Rock Ranch Phase 5a, 5b & 5 <sup>4b</sup>	Yavapai	16 North	3 West	15, 22	73	22-400831	Adequate		10/08/02	ICR Water Users Association, Inc.
322	M	Talking Rock Ranch Phase 8 <sup>4c</sup>	Yavapai	16 North	3 West	22	80	22-401206	Adequate		02/18/04	ICR Water Users Association
323	M	Talking Rock Ranch Phase 9 <sup>4d</sup>	Yavapai	16 North	3 West	15	107	22-401417	Adequate		09/08/04	ICR Water Users Association
324	M	Talking Rock Ranch Phase 26 <sup>4e</sup>	Yavapai	16 North	3 West	33	38	22-401355	Adequate		09/08/04	ICR Water Users Association
325	M	Talking Rock Ranch Phase 27 <sup>4f</sup>	Yavapai	16 North	3 West	22	38	22-401175	Adequate		02/18/04	ICR Water Users Association
326	M	Terra Pine	Gila	12 North	8 East	36	30		Adequate		01/02/80	E & R Water Company
327	A	Thunder Mountain Ranch	Yavapai	17 North	5 East	10, 11	100	22-300070	Adequate		11/21/95	Arizona Water Company
328	A	Thunder Mountain Ranch #2	Yavapai	17 North	5 East	10	43	22-300509	Adequate		09/01/98	Arizona Water Company
329	A	Thunder Ridge	Yavapai	15 North	5 East	25	230	22-300118	Adequate		07/12/96	Dry Lot Subdivision
330	A	Thunderbird Hills East #2	Yavapai	17 North	5 East	14	16		Adequate		10/07/75	Arizona Water Company
331	A	Thunderbird Hills South #2	Yavapai	17 North	5 East	14	8		Adequate		10/15/75	Arizona Water Company
332	A	Tierra Siena Condominium	Yavapai	17 North	5 East	13	32		Adequate		11/25/87	Oak Creek Water Company
333	A	Tierra Verde Subdivision	Yavapai	15 North	3 East	3	39	22-300586	Adequate		12/22/98	Cottonwood Water Works, Inc.
334	I	Timber Ridge Estates II	Gila	10 North	10 East	4	22	22-300147	Inadequate	A2	05/22/96	Town of Payson
335	I	Town & County Estates	Gila	10 North	10 East	3	19	22-400231	Inadequate	A1, C	01/26/00	Town of Payson
336	M	Town Homes at Flagstaff Meadows	Coconino	21 North	5 East	1	105	22-401224	Inadequate	A1	03/15/04	Utility Source, LLC
337	I	Trailwood #1	Gila	10 North	10 East	4	104		Inadequate	A1, A2	04/14/94	Town of Payson
338	I	Trailwood #2	Gila	10 North	10 East	4	86		Inadequate	A1, A2, C	12/07/94	Town of Payson
339	I	Trailwood #3	Gila	10 North	10 East	4	123	22-300028	Inadequate	A2	07/26/95	Town of Payson
340	A	Two Ponds Estates	Yavapai	14 North	4 East	12	4		Adequate		07/24/80	Dry Lot Subdivision
341	A	Valley Shadows	Yavapai	17 North	5 East	14	158		Adequate		03/21/74	Arizona Water Company
342	A	Valley View Estates	Yavapai	16 North	3 East	17	28	22-300469	Inadequate	A1	06/17/98	Dry Lot Subdivision
343	A	Ventana Vista	Yavapai	15 North	3 East	15	69		Inadequate	B, C	01/18/94	Cordes Lakes Water Company

**Table 5-10 Adequacy Determinations in the Verde River Basin (cont'd)<sup>1</sup>**

Map Key	Map Location <sup>2</sup>	Subdivision Name	County	Location			No. of Lots	ADWR File No. <sup>3</sup>	ADWR Adequacy Determination	Reason(s) for Inadequacy Determination <sup>4</sup>	Date of Determination	Water Provider at the Time of Application
				Township	Range	Section						
344	A	Verde Cliffs	Yavapai	14 North	5 East	31	208	22-401354	Inadequate	D	07/21/04	Camp Verde Water System, Inc.
345	A	Verde Monterey	Yavapai	15 North	3 East	11	14		Adequate		10/01/84	Cordes Lakes Water Company
346	A	Verde Outpost	Yavapai	14 North	5 East	31	28		Adequate		03/12/80	Camp Verde Water System
347	A	Verde Park	Yavapai	13 North	5 East	9, 16	59		Inadequate	C	01/26/82	Dry Lot Subdivision
348	A	Verde Ranchettes	Yavapai	15 North	4 East	17	17		Adequate		02/04/85	Dry Lot Subdivision
349	A	Verde Santa Fe	Yavapai	15 North	4 East	6	103	22-300257	Adequate		02/21/97	Verde Santa Fe Water Company
350	A	Verde Valley Business Park	Yavapai	14 North	4 East	15	23	22-401142	Adequate		01/12/04	Camp Verde Water System
351	A	Verde Village # 6	Yavapai	15 North	3 East	10, 11	19	22-300170	Adequate		09/06/96	Cordes Lakes Water Company
352	A	Verde West Acres # 2	Yavapai	14 North	4 East	14	16		Inadequate	C	06/09/75	Dry Lot Subdivision
353	A	Village Park	Yavapai	16 North	6 East	18	25		Adequate		09/10/80	Big Park Water Company
354	A	Villages Estates	Yavapai	16 North	5 East	13	25	22-401469	Adequate		12/03/04	Arizona Water Company
355	A	Villas on Elm	Yavapai	15 North	3 East	2	110	22-401483	Adequate		12/01/04	Cottonwood Water Works
356	A	Vista Grande Ranch	Yavapai	15 North	3 East	3	48	22-300488	Adequate		07/22/98	Cottonwood Water Works, Inc.
357	A	Vista Montana	Yavapai	17 North	5 East	12	60		Adequate		04/08/81	Arizona Water Company
358	A	Vista Ridge Manor	Coconino	17 North	6 East	18	8		Adequate		09/20/82	Arizona Water Company
359	M	Walnut Glen	Gila	12 North	8 East	29	29		Adequate		12/12/74	E & R Water Company
360	A	Western Hills	Yavapai	17 North	5 East	2, 11	79		Adequate		08/15/77	Arizona Water Company
361	A	Western Hills # 2	Yavapai	17 North	5 East	11	63		Adequate		06/12/79	Arizona Water Company
362	I	Western Manor	Gila	11 North	10 East	33, 34	26		Inadequate	A1, A2	12/27/74	United Utilities Company
363	A	Westward	Yavapai	17 North	5 East	2, 11	25		Adequate		03/25/80	Arizona Water Company
364	M	Whispering Canyon	Yavapai	16 North	3 West	33, 34	400	22-400580	Adequate		03/07/02	ICR Water Users Association
365	M	Whitney Ranch Estates	Maricopa	6 North	9 East	7	20	22-300033	Adequate		08/19/97	Whitney Ranch Estates Property Owners'
366	A	Wild Turkey Townhouses # 2	Yavapai	16 North	5 East	13	82		Adequate		12/26/78	Big Park Water Company
367	I	Wildwood	Gila	10 North	10 East	5	99		Inadequate	A1, A2	07/20/83	Town of Payson
368	A	Wilma Overal Property	Yavapai	17 North	5 East	27	1		Adequate		08/10/89	Dry Lot Subdivision
369	M	Wineglass Lake Estates	Yavapai	18 North	3 West	13	117		Inadequate	A1	10/15/93	Dry Lot Subdivision
370	M	Wonder Valley	Gila	11 North	10 East	11	8		Adequate		08/22/75	Co-op water system
371	I	Woodhill # 4-8 (amended)	Gila	11 North	10 East	33	396		Inadequate	A2, C	05/31/95	Town of Payson
372	I	Woodland Meadows # 1	Gila	10 North	10 East	4, 5	102		Inadequate	A1, A2	01/08/81	Town of Payson
373	I	Woodland Meadows # 2	Gila	10 North	10 East	4, 5	91		Inadequate	A1, A2	11/09/82	Town of Payson
374	I	Woodland Meadows # 3	Gila	10 North	10 East	4	84		Inadequate	A1, A2	06/20/84	Town of Payson
375	I	Woodland Meadows # 4	Gila	10 North	10 East	4, 5	24		Inadequate	A1, A2	04/12/88	Town of Payson

**Table 5.5-10 Adequacy Determinations in the Verde River Basin (cont'd)<sup>1</sup>**

Notes:

<sup>1</sup>Each determination of the adequacy of water supplies available to a subdivision is based on the information available to ADWR and the standards of review and policies in effect at the time the determination was made. In some cases, ADWR might make a different determination if a similar application were submitted today, based on the hydrologic data and other information currently available, as well as current rules and policies.

<sup>2</sup>M = Figure 5.5-11; I = Insert; A = Figure 5.5-11A

<sup>3</sup>Prior to February 1995, ADWR did not assign file numbers to applications for adequacy determination.

<sup>4</sup>A. Physical/Continuous

    1) Insufficient Data (applicant chose not to submit necessary information, and/or available hydrologic data insufficient to make determination)

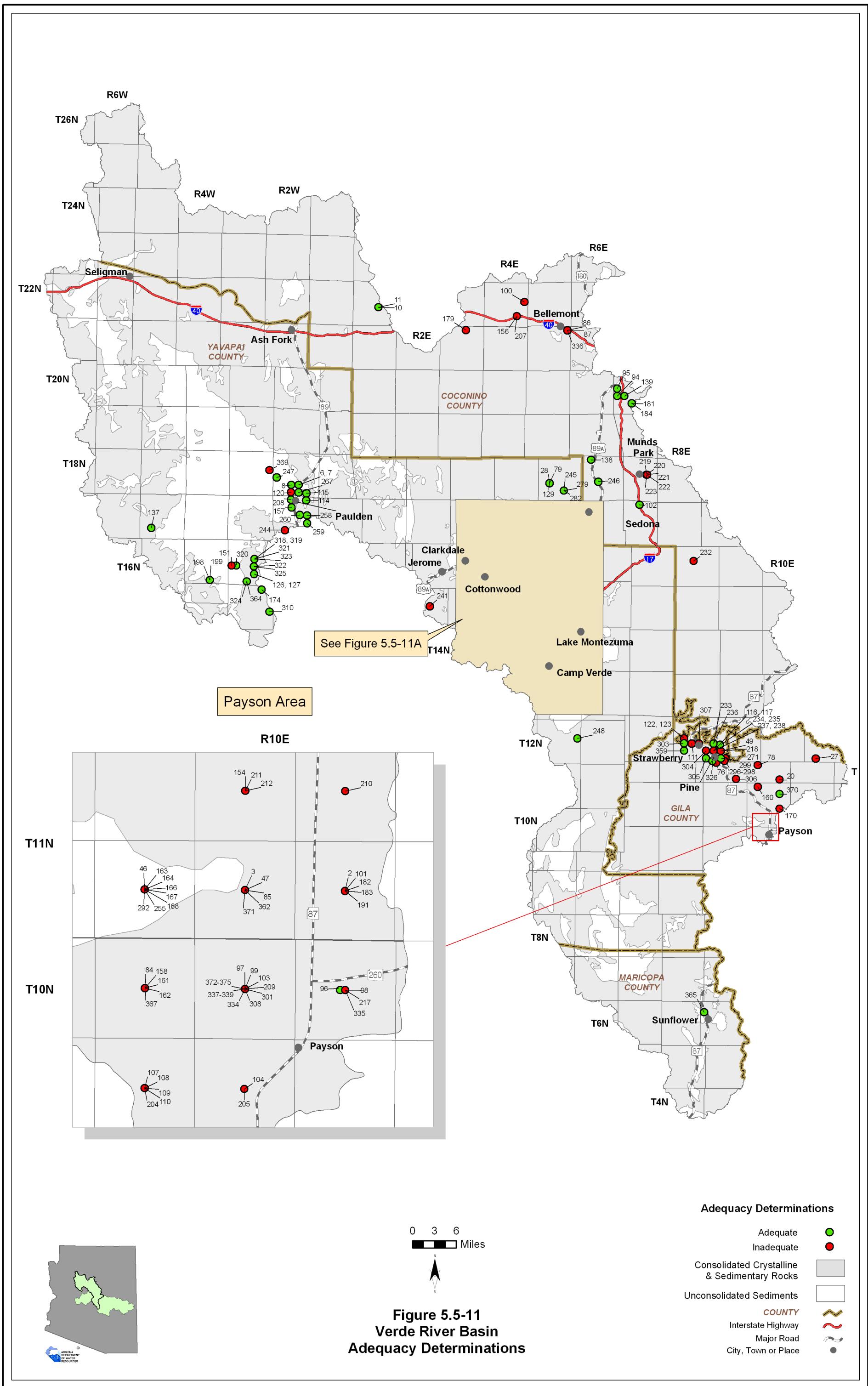
    2) Insufficient Supply (existing water supply unreliable or physically unavailable; for groundwater, depth-to-water exceeds criteria)

    3) Insufficient Infrastructure (distribution system is insufficient to meet demands or applicant proposed water hauling)

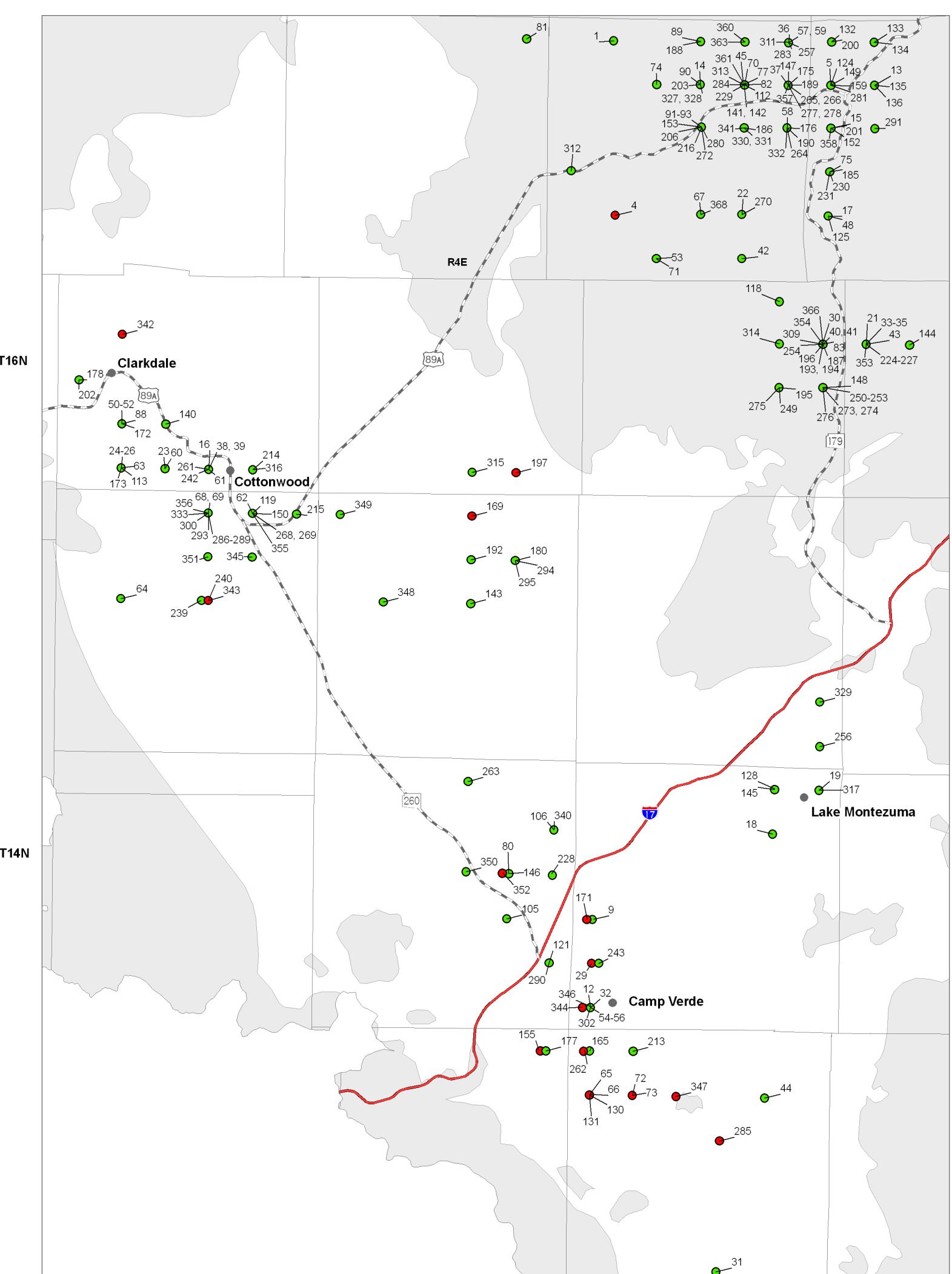
B. Legal (applicant failed to demonstrate a legal right to use the water or failed to demonstrate the provider's legal authority to serve the subdivision)

C. Water Quality

D. Unable to locate records







0 3 6 Miles

#### Adequacy Determinations

- |  |                            |
|--|----------------------------|
| Adequate<br><br>Inadequate   | Adequate<br><br>Inadequate |
| Consolidated Crystalline & Sedimentary Rocks<br>Unconsolidated Sediments |                            |

- |  |   |
|--|---|
| <b>COUNTY</b><br>Interstate Highway<br>Major Road<br>City, Town or Place | Interstate Highway<br>Major Road<br>City, Town or Place |
|--|---|

**Figure 5.5-11A**  
**Verde River Basin**  
**Adequacy Determinations**

# Verde River Basin

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